

- C. INSTALL THE BELLOWS (PNEUMATIC TILT MODELS).** Refer to Section 2, Paragraph 2.4, Installation of Mattress Tilt Bellows.

OR

**INSTALL THE MATTRESS TILT CONTROLS (MANUAL TILT MODELS)** on the Main Deck.

**NOTE:** *There is a right-hand and left-hand tilt mechanism.*

**CAUTION:** Be sure the two thumbscrews that hold the tilt mechanism to the deck are tightened securely.

- D. INSTALL THE AIR CURTAIN COVER AND MATTRESS TRAY.**

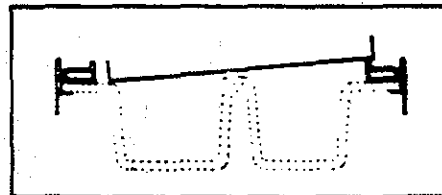
**WARNING:** The Air Curtain Cover must be properly installed for correct temperature control.

Hook the lip on the bottom rear of the Air Curtain onto the rod at the rear of the Main Deck Assembly, then lower the cover toward the front of the Incubator to the rest position. Close the Hood Assembly and check for proper operation of the Air Curtain Cover. The Air Curtain Cover is operating correctly if it rises slightly when the Access Panel is opened. Install the Mattress Tray by positioning it a few inches above the mattress rails, then lowering it straight down.

- E. INSTALL THE DISPOSABLE MATTRESS COVER.** Place a new disposable mattress cover over the mattress, then place the mattress onto the tray.

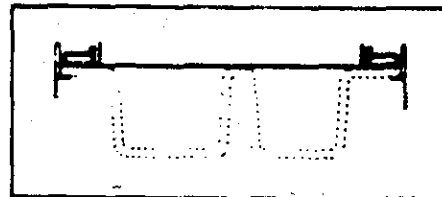
**WRONG MAIN DECK POSITION—**

Main deck placed up on gasket on one side, permitting air flow as shown by dashed line.



**CORRECT MAIN DECK POSITION—**

Main deck placed down on conditioning chamber top.

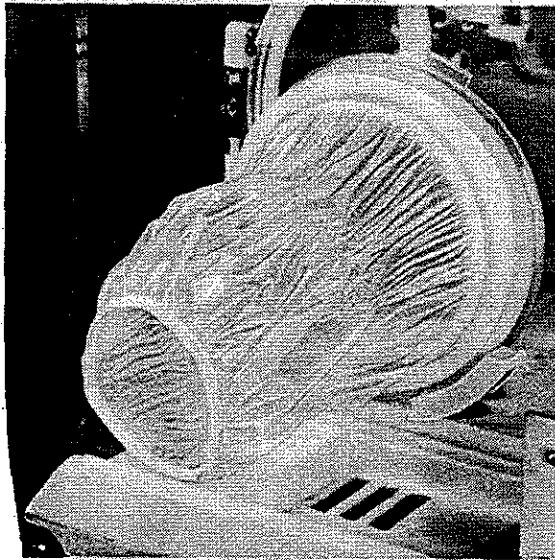


**FIGURE 4.8 INSTALLATION OF MAIN DECK AND HOOD SEAT GASKET**

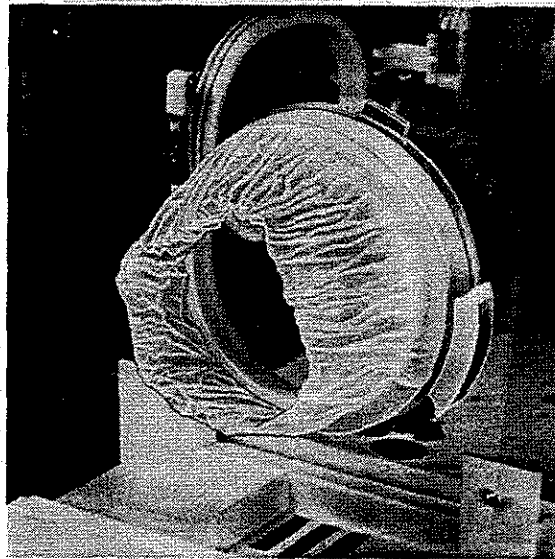
Change 1

**F. INSTALL DISPOSABLE IRIS ENTRY PORT SLEEVES.** Install a new Iris Entry Port Sleeve as shown in Figure 4.9.

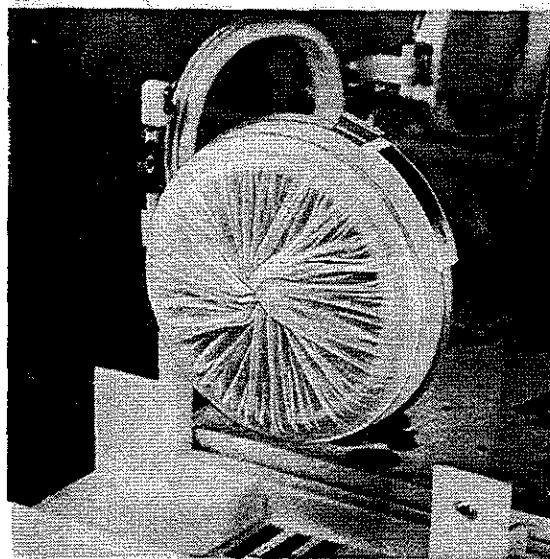
**NOTE:** If the Incubator is to be gas sterilized, wait until after sterilization to install new sleeves.



1. Install the smaller diameter elastic band of a new sleeve over the inner ring of the port housing.



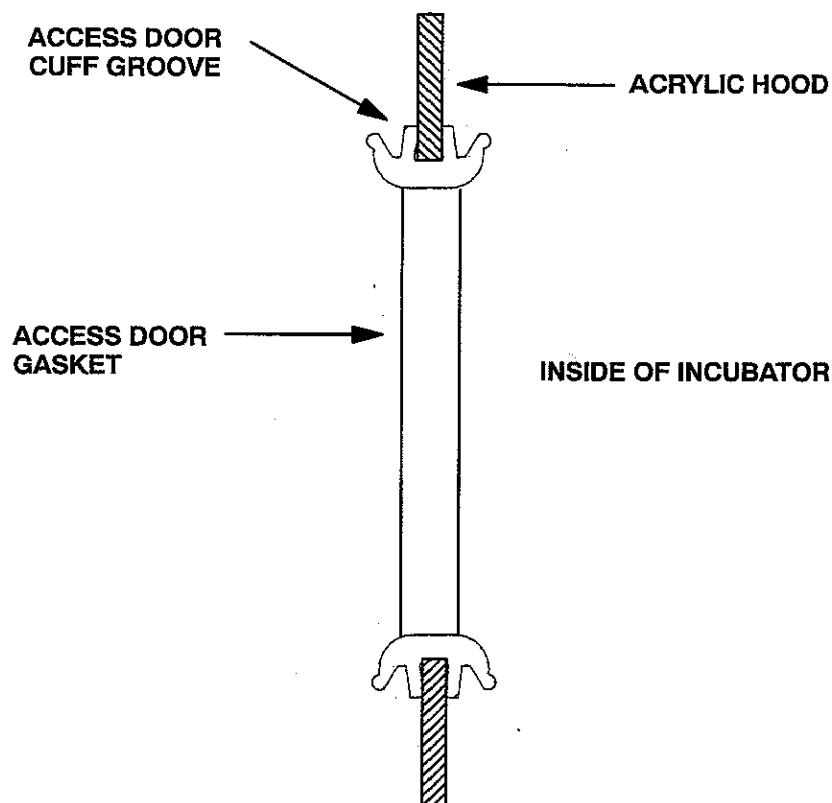
2. Fold back and slip larger elastic band over the outer ring of the port housing.



3. Rotate outer ring to close. If properly installed, the sleeve will open again if rotation is reversed.

**FIGURE 4.9 INSTALLATION OF IRIS ENTRY PORT SLEEVE**

- G. **INSTALL A TUBING ACCESS PORT** into the front edge of each side of the Hood. Replace if distorted or torn.
- H. **INSTALL AN ACCESS DOOR GASKET** behind each Access Door, as shown in Figure 4.10.



**FIGURE 4.10 INSTALLATION OF ACCESS DOOR GASKET**

- I. **INSTALL A NEW ACCESS DOOR CUFF** onto each Access Door Gasket by stretching the larger diameter elastic band into the groove in the gasket. When installed correctly, the cuff has a small opening at its center. The Access Door should latch with slight pressure and should open when the latch lever is depressed.

**NOTE:** If the Incubator is to be gas sterilized, wait until after sterilization to install new cuffs.

- J. **INSTALL HOOD INNER WALL** by reversing the procedure shown in Figure 4.2.
- K. **INSTALL THE HEAT SHIELD** onto the Access Panel.
- L. **INSTALL A NEW AIR INTAKE MICROFILTER** if necessary. Replace the Air Intake Microfilter Cover and tighten the two thumbscrews. If a new filter is installed, indicate the date on the place provided on the cover.
- M. **CHECK THAT THE INCUBATOR IS SECURELY CLAMPED TO STAND.** Locking bar should be approximately horizontal when locking bar is released and clamp is engaged in retainer on Incubator.

**IMPORTANT:** Perform a complete functional checkout (Paragraph 2.7.2 and 2.7.3) before returning the unit to service.

Change 7

### ■ 4.3 GAS STERILIZATION (DELETED)

Change 7

## **SECTION 5 SERVICE**

### **5.1 GENERAL**

This section provides Controller configuration procedures, calibration procedure, troubleshooting procedures and removal and replacement procedures.

### **5.2 THE DIAGNOSTIC MENU**

The C500/550 Isolette® Infant Incubator Controller contains a Diagnostic Menu which has three sub-menus. The Configuration Menu, the Test System Menu and the System Information Menu. Figure 5.1 provides a diagram of the Diagnostic Menu structure.

#### **THE CONFIGURATION MENU**

This menu provides the users with the ability to change various operating parameters to suit their current needs. Refer to Section 2 for a description of these parameters along with a listing of the factory default settings.

#### **THE SYSTEM INFORMATION MENU**

This menu provides service personnel with data collection logs and configuration information. In addition, it provides the user and service personnel with the Controller Software Version.

#### **THE TEST SYSTEM MENU**

This menu is intended for use only by qualified service personnel and provides various test and calibration routines.

The Diagnostic Menu may be accessed by simultaneously pressing and holding the **> 37°** and **°C/°F** keys when the message **SELF-TEST RUNNING** is appearing in the Controller Message Center. The Message Diagnostic Menu will appear for approximately 5 seconds, then go to the Configuration Sub-Menu.

The remaining sub-menus (Test System and System Information) can then be selected by using the **Air Set Temperature** or **Baby Set Temperature** (C550 only) up/down arrow keys.

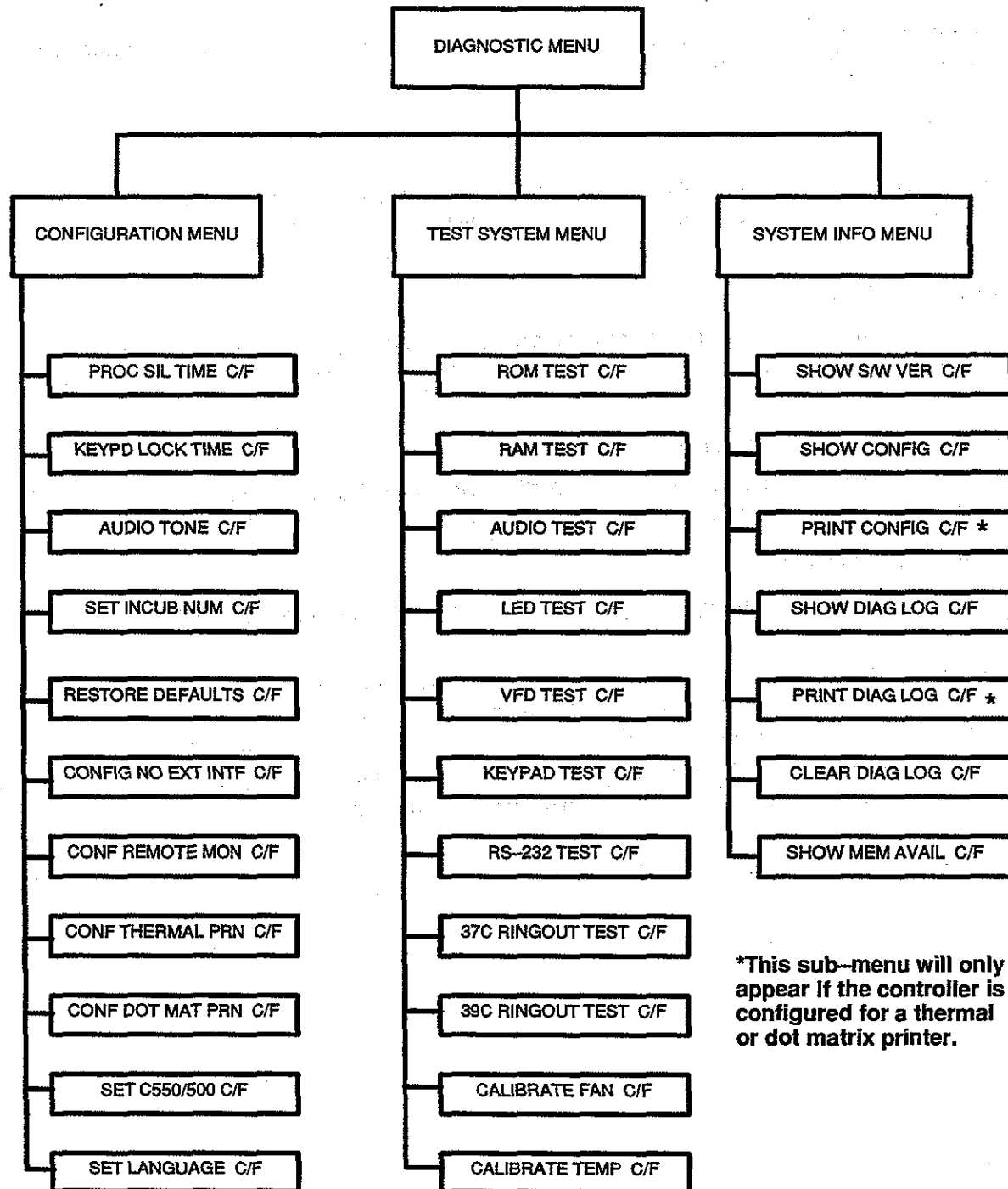


FIGURE 5.1 DIAGNOSTIC MENU STRUCTURE

## 5.3 THE CONFIGURATION MENU

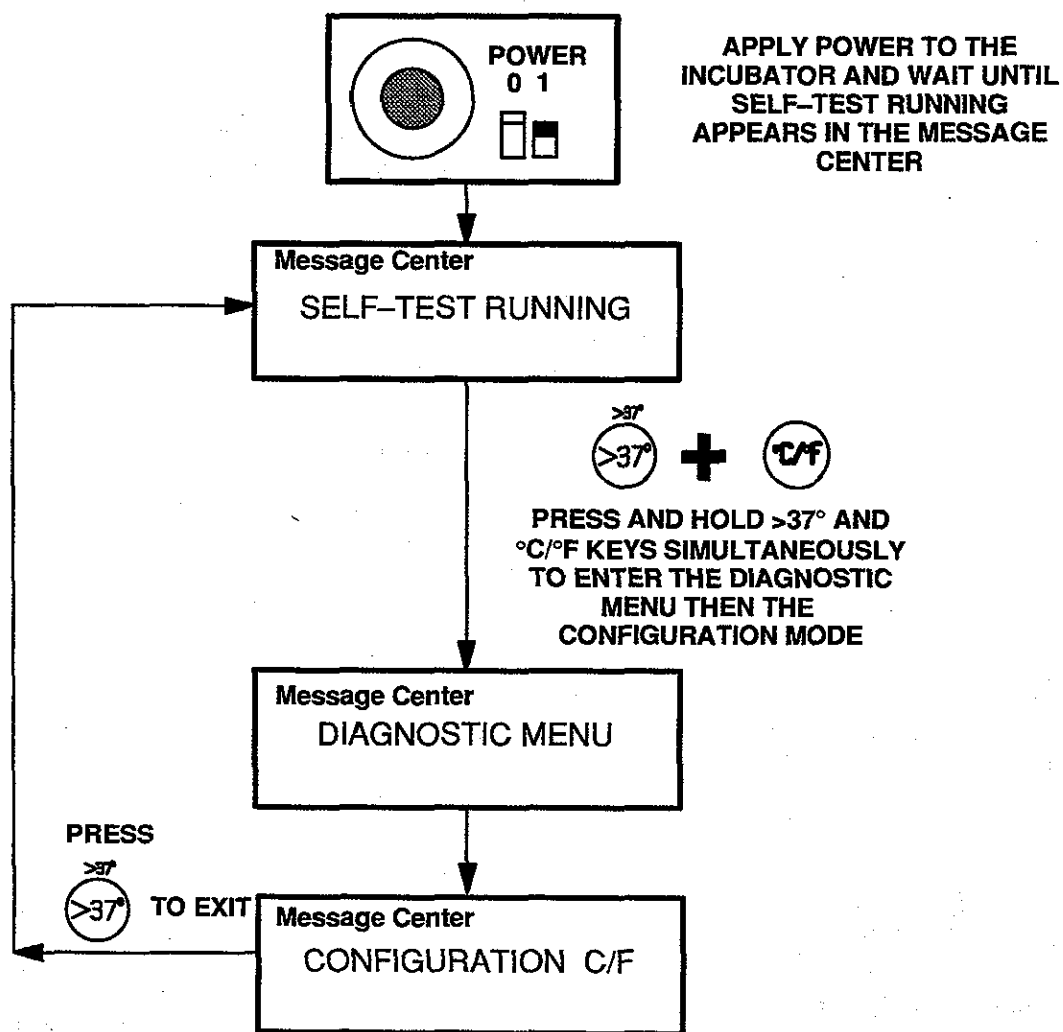
Upon installation, or at any time during use, Incubator parameters (refer to Paragraph 2.6) may be changed to meet the current needs of the operator. This is accomplished by first selecting the Configuration Menu (refer to Paragraph 5.3.1), then selecting the desired parameter menu.

### 5.3.1 SELECTING THE CONFIGURATION MENU

The Configuration Menu may be selected when the SELF-TEST RUNNING Message is appearing in the Message Center.

Before attempting to enter the Configuration Menu or change a parameter, refer to Section 3, the Message Center, and Section 4, Operation, Paragraph 4.1, Controls and Indicators of the Operator's Manual.

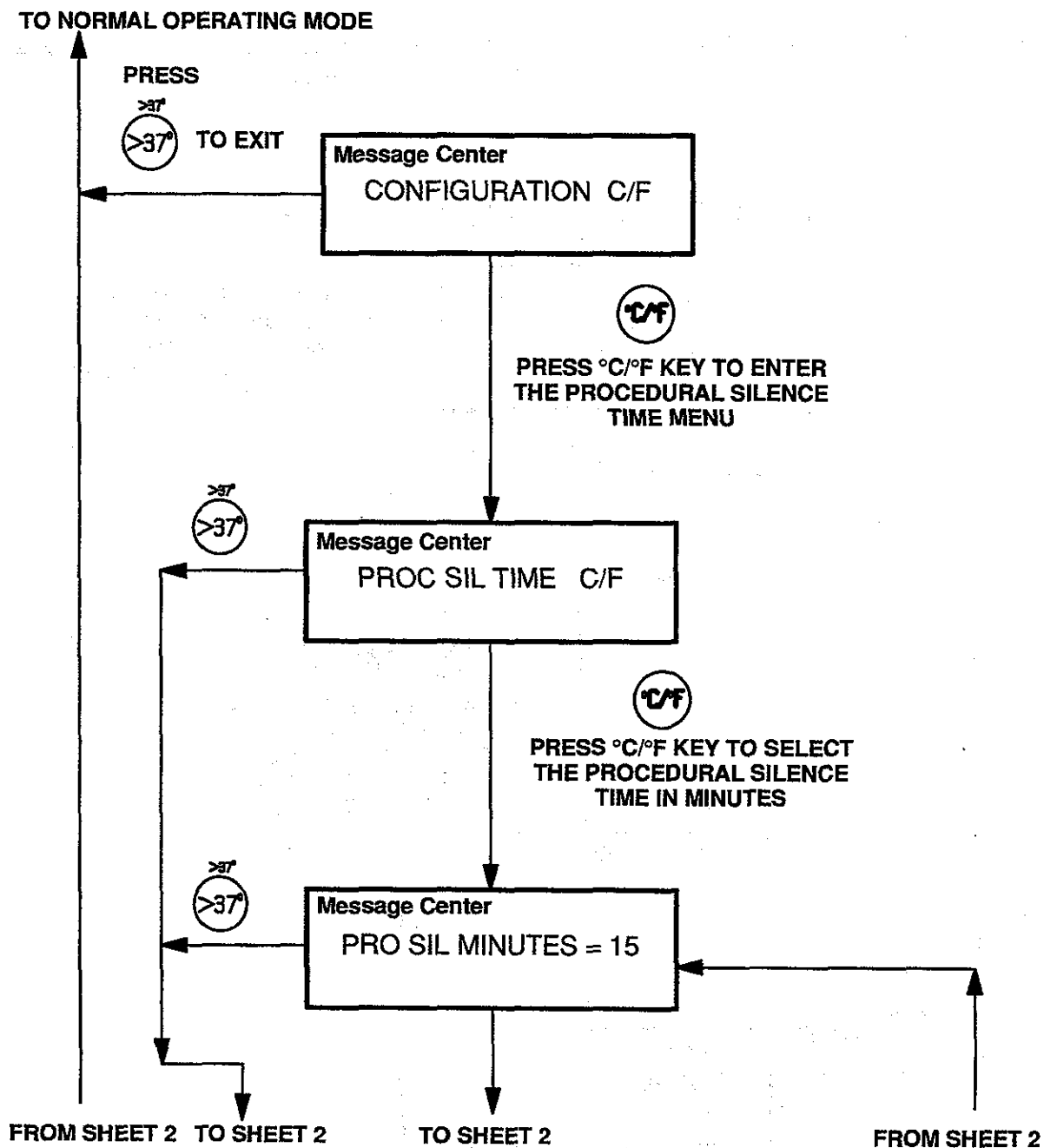
### SELECTING THE CONFIGURATION MENU



### 5.3.2 SETTING THE PROCEDURAL SILENCE TIME

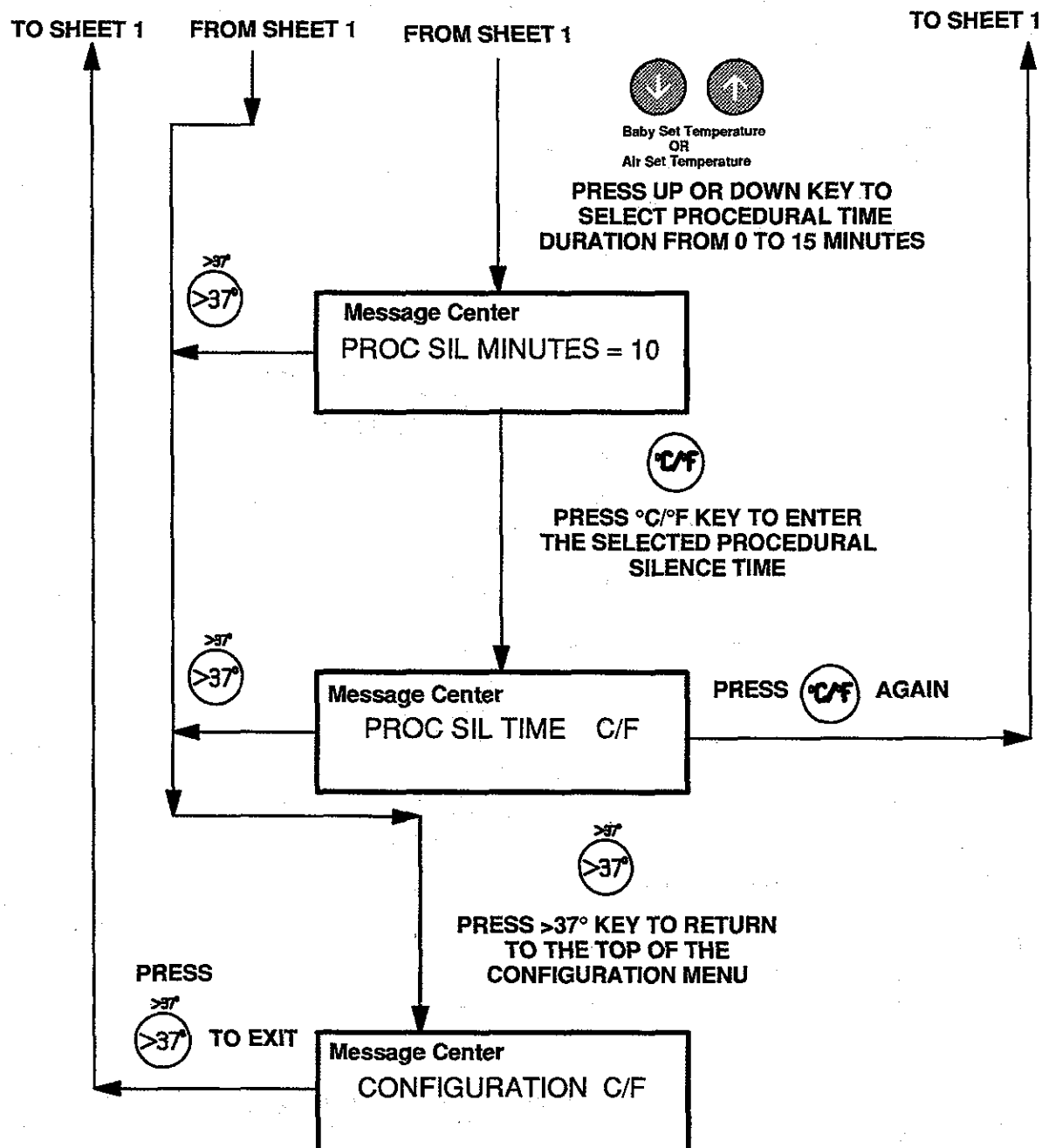
The Procedural Silence Time duration may be set from 0 to 15 minutes. The default setting is 15 minutes. To set the Procedural Silence Time duration, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

## SETTING THE PROCEDURAL SILENCE TIME DURATION (Sheet 1)





## SETTING THE PROCEDURAL SILENCE TIME DURATION (Sheet 2)

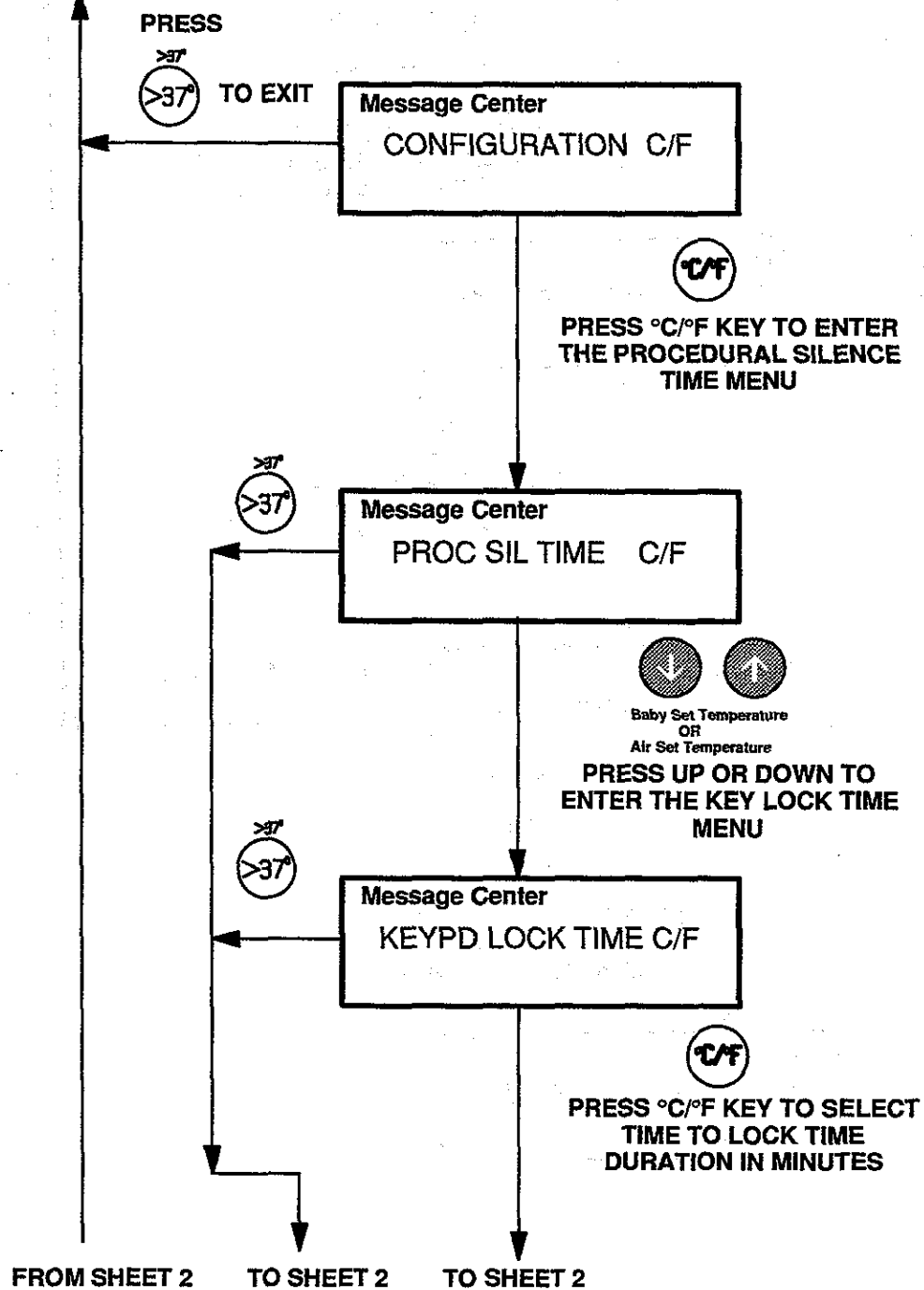


### 5.3.3 SETTING THE KEYPAD TIME-TO-LOCK TIME

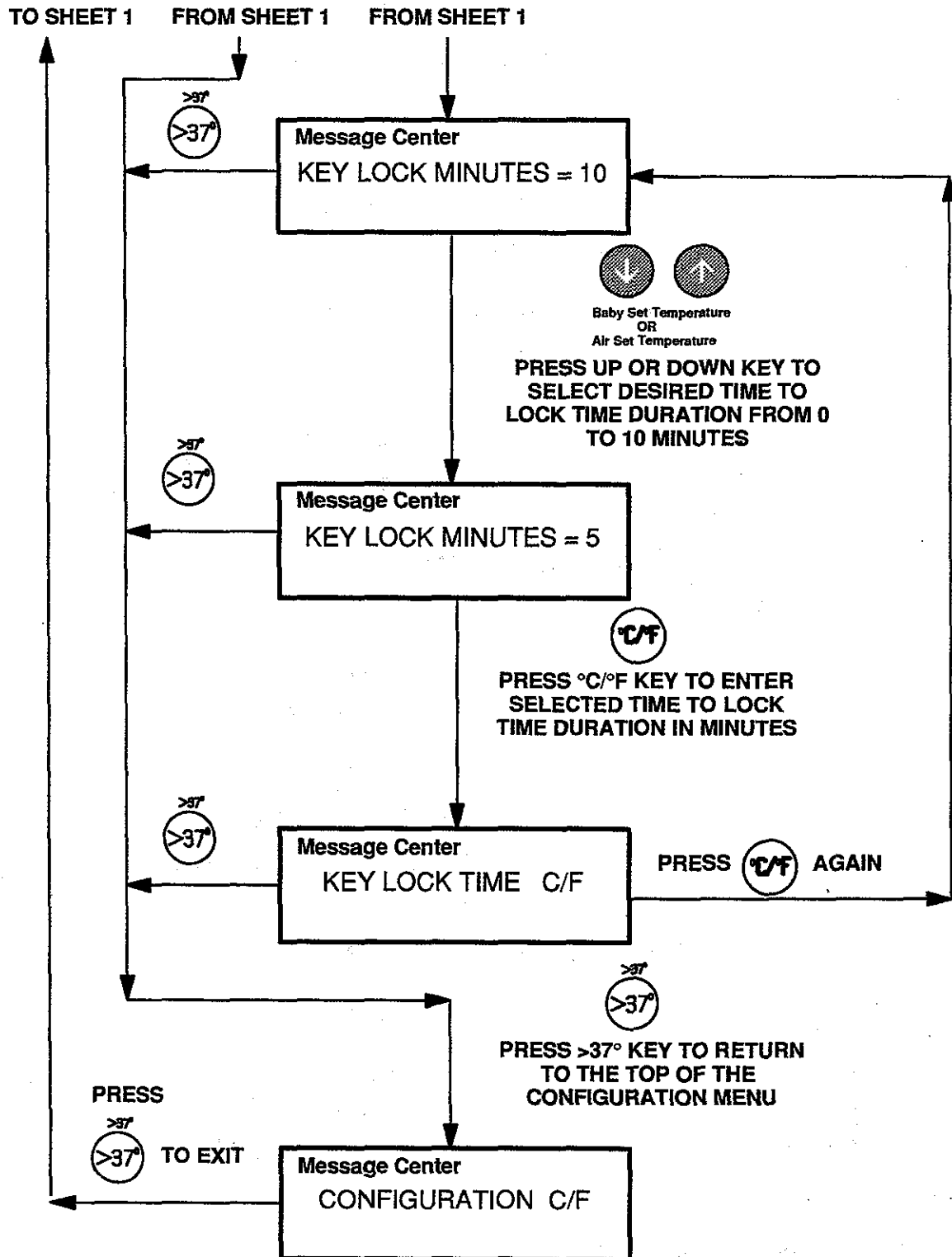
The Keypad Time-to-Lock duration may be set from 0 to 10 minutes. To set the the Time-to-Lock duration, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### SETTING THE KEYPAD LOCK TIME (Sheet 1)

TO NORMAL OPERATING MODE



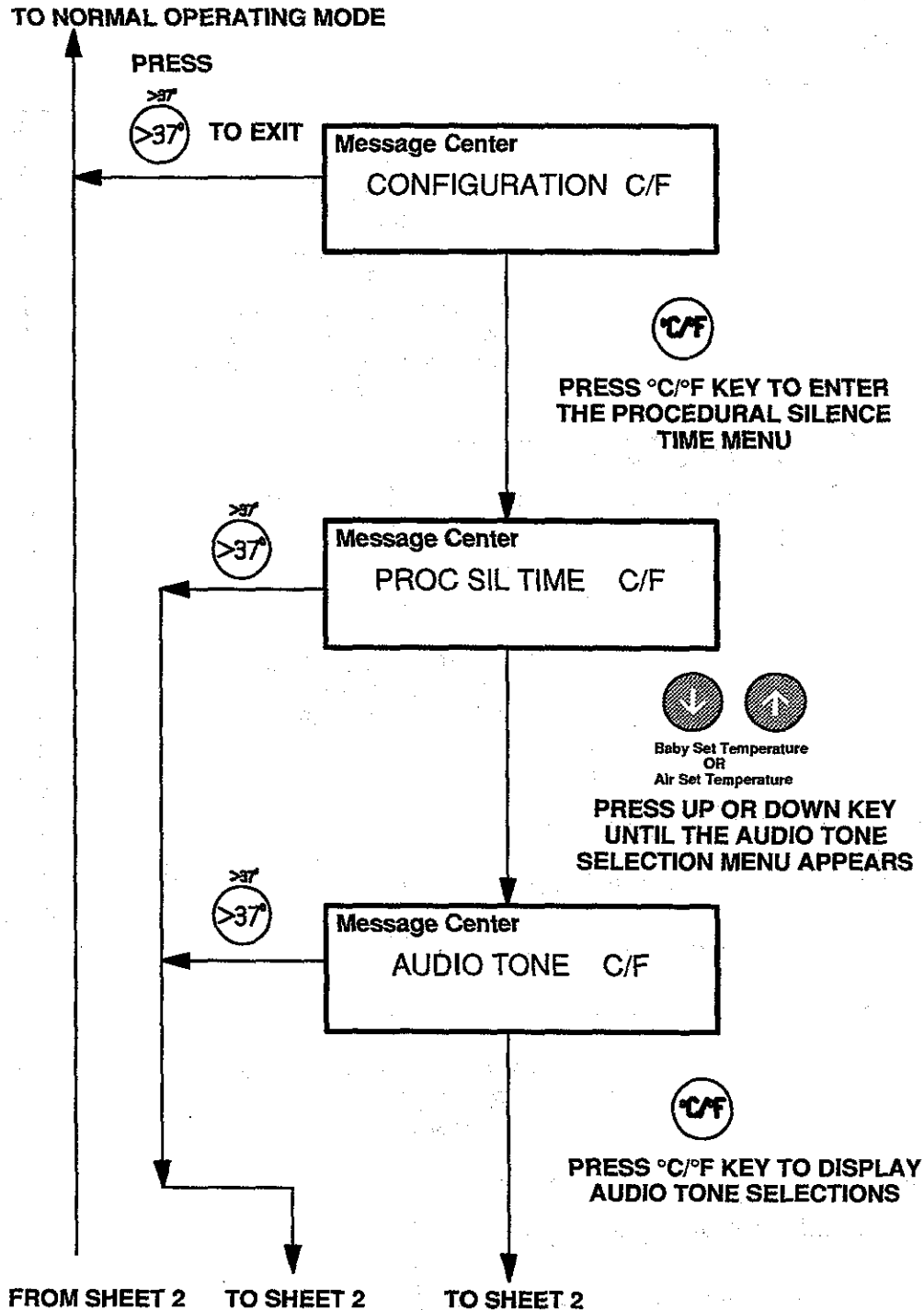
## SETTING THE KEYPAD LOCK TIME (Sheet 2)



### 5.3.4 SELECTING AN AUDIO TONE

The Incubator has five different audio tones available. To select an alarm tone, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### SELECTING AN AUDIO TONE (Sheet 1)

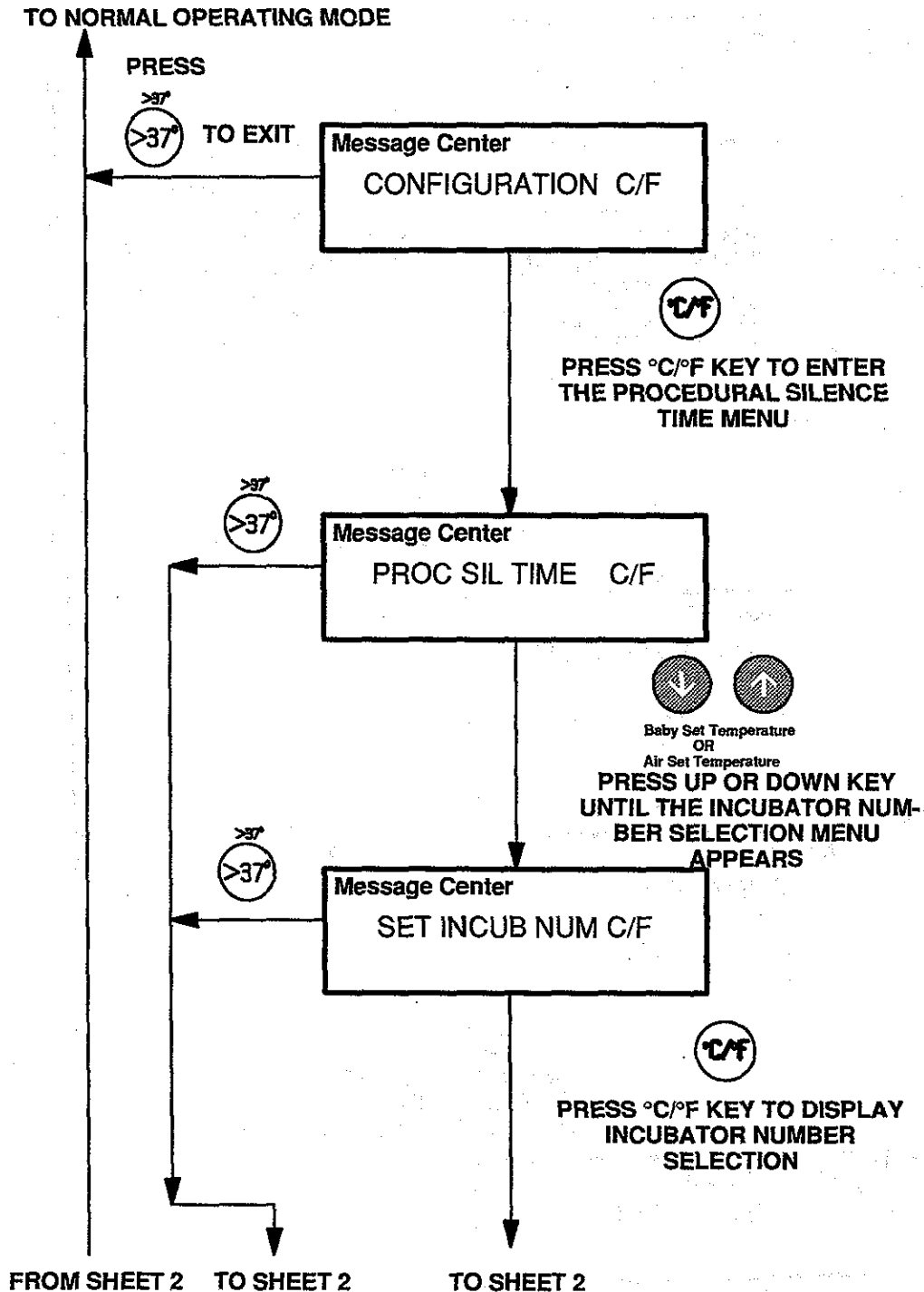




### 5.3.5 SELECTING AN INCUBATOR NUMBER

An Incubator Number from 01 to 99 may be selected. To select an Incubator Number, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### SELECTING AN INCUBATOR NUMBER (Sheet 1)



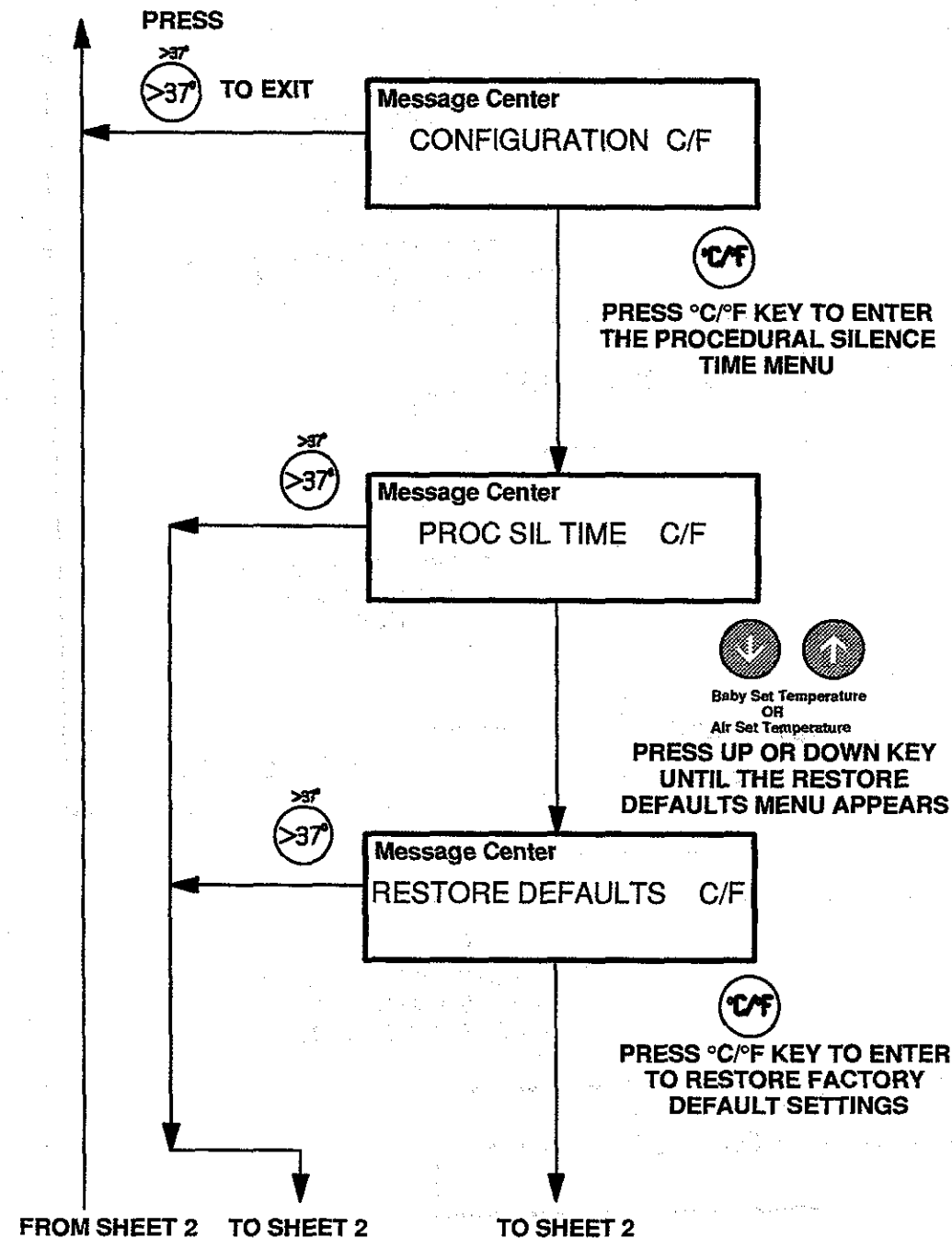


### 5.3.6 RESTORING FACTORY DEFAULT SETTINGS

To restore the factory default settings for Air Mode, Air and Baby Set Temperature, Procedural Silence Time, Keypad Time-to-Lock, Audio Tone, Incubator Number and No External Interface, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

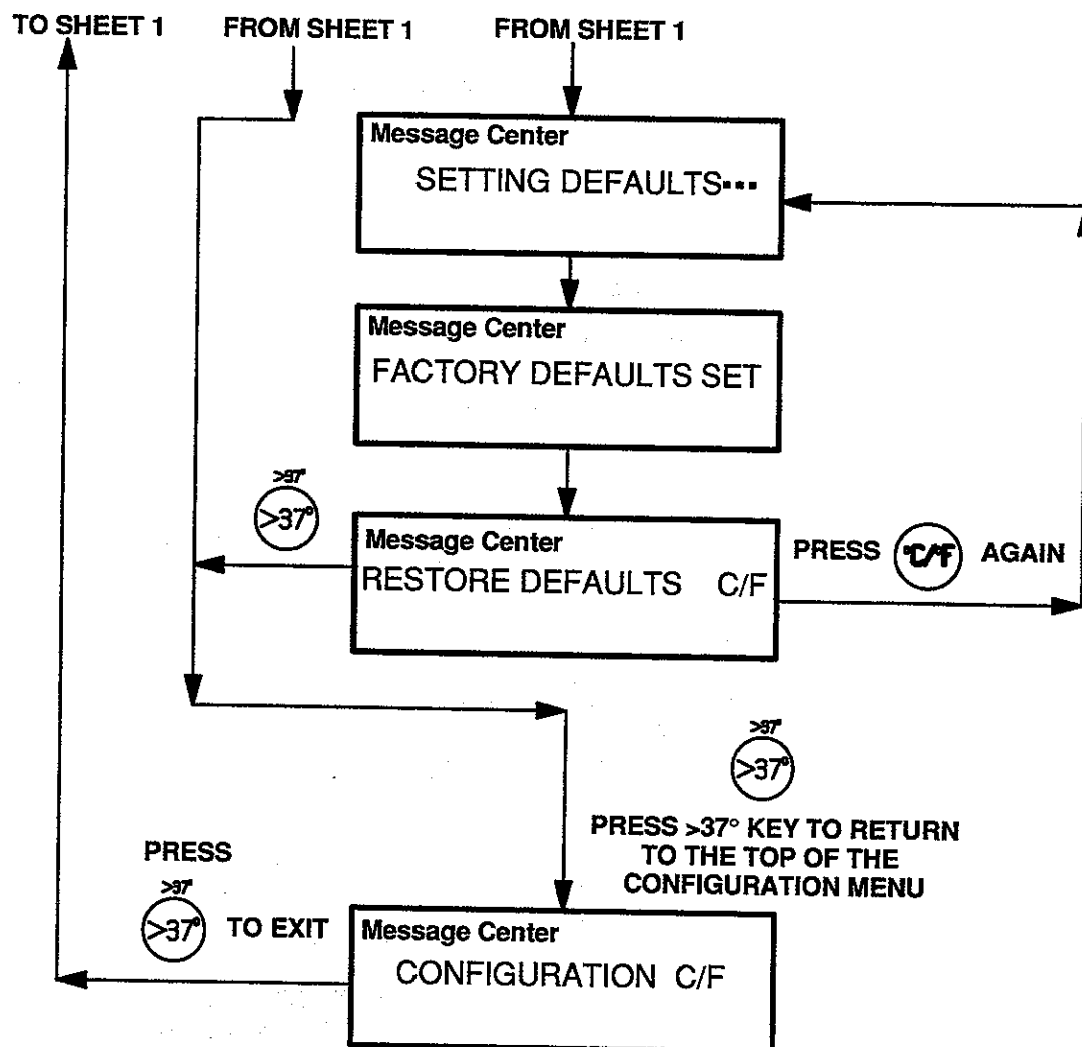
## RESTORING FACTORY DEFAULTS (Sheet 1)

TO NORMAL OPERATING MODE





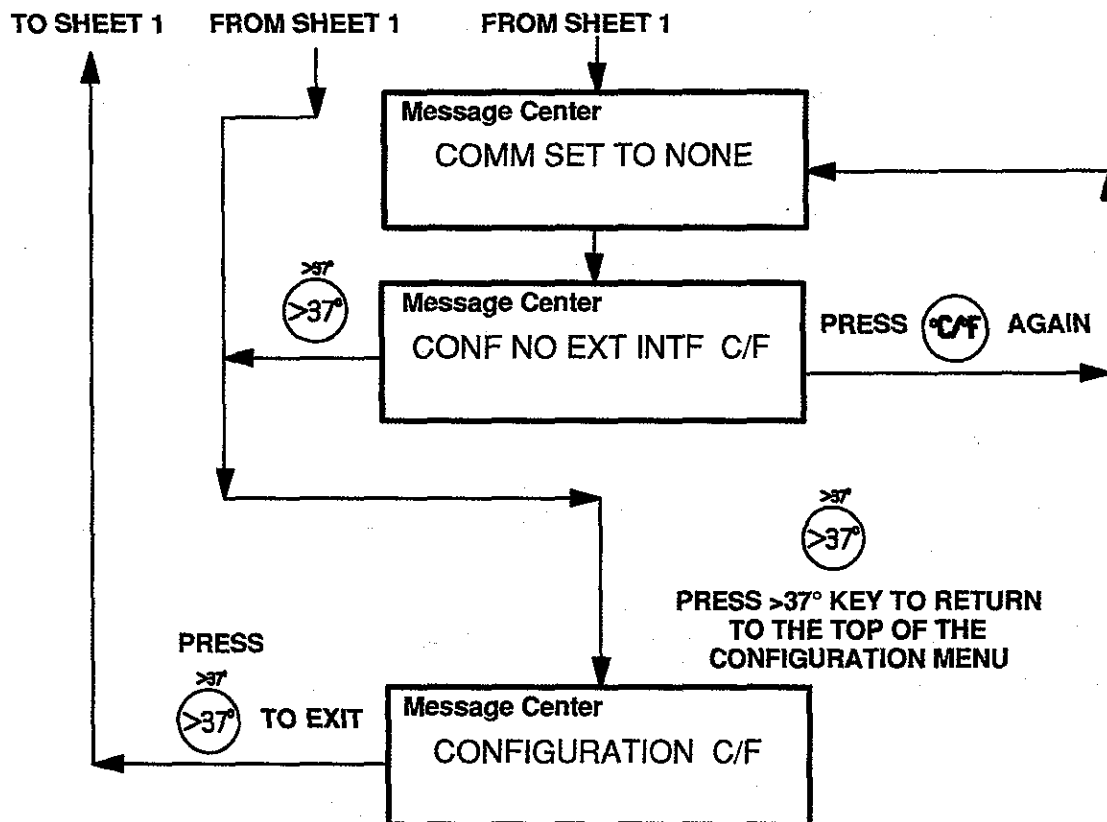
## RESTORING FACTORY DEFAULTS (Sheet 2)



## NO EXTERNAL INTERFACE (Sheet 1)



# NO EXTERNAL INTERFACE (Sheet 2)

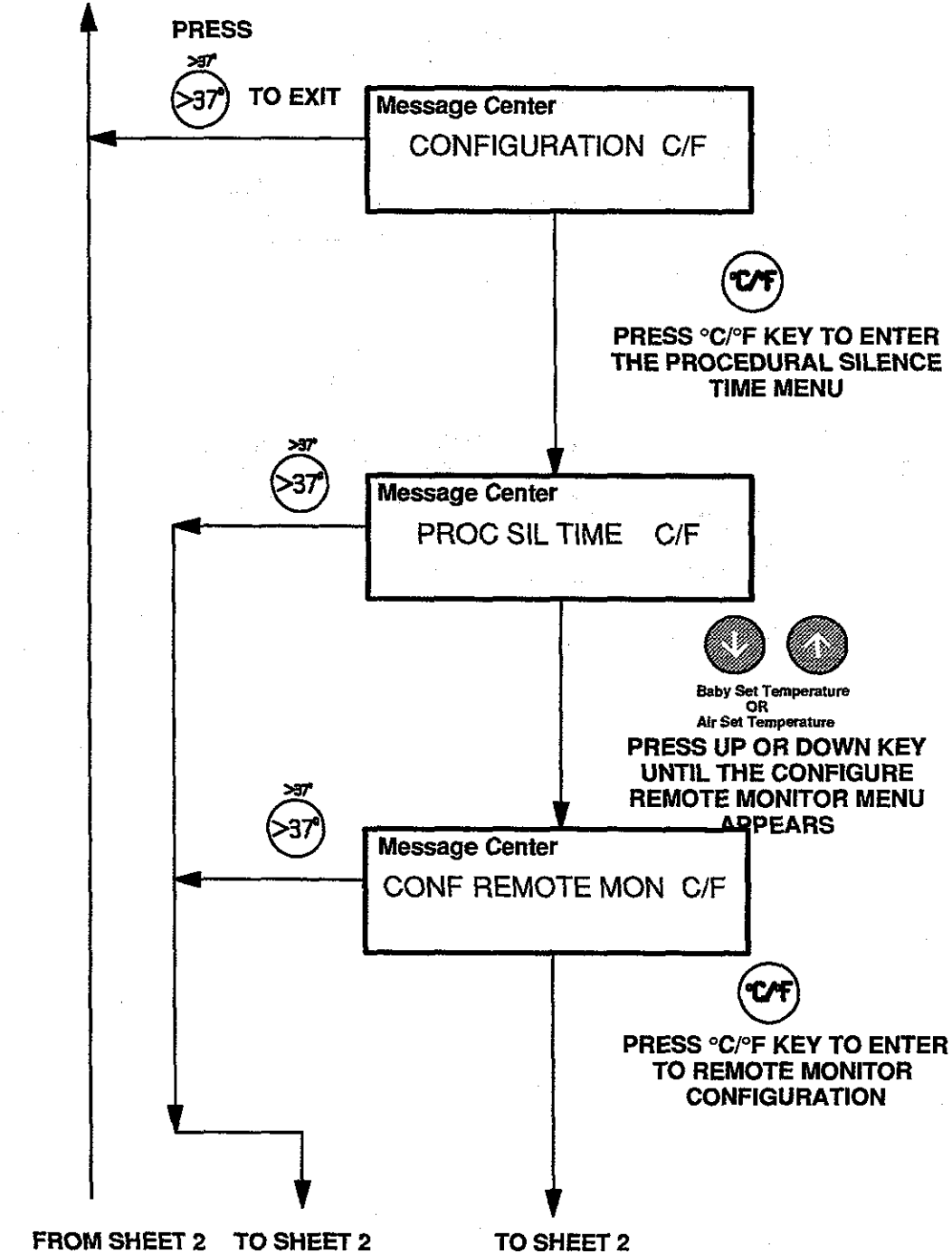


### 5.3.8 CONFIGURING THE CONTROLLER TO A REMOTE MONITOR

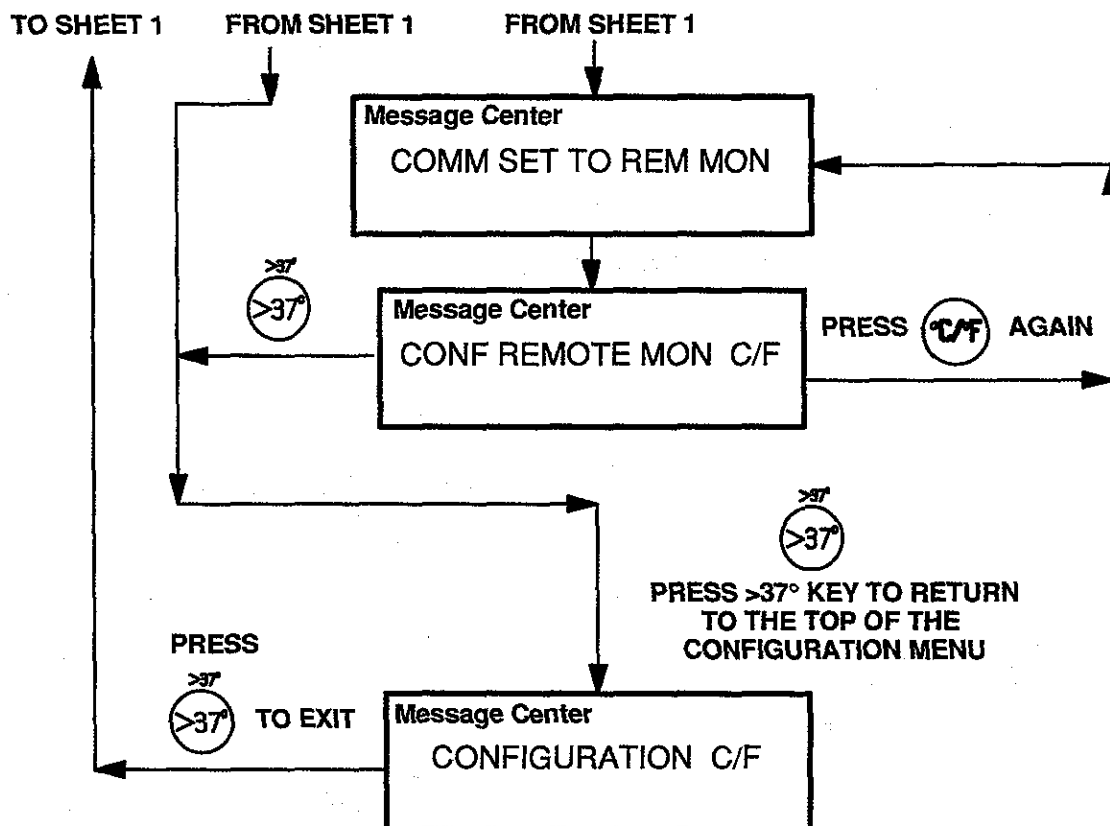
To configure the **SERIAL PORT** located on the Controller Side Panel to communicate with a remote monitor, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### CONFIGURATION FOR A REMOTE MONITOR (Sheet 1)

TO NORMAL OPERATING MODE

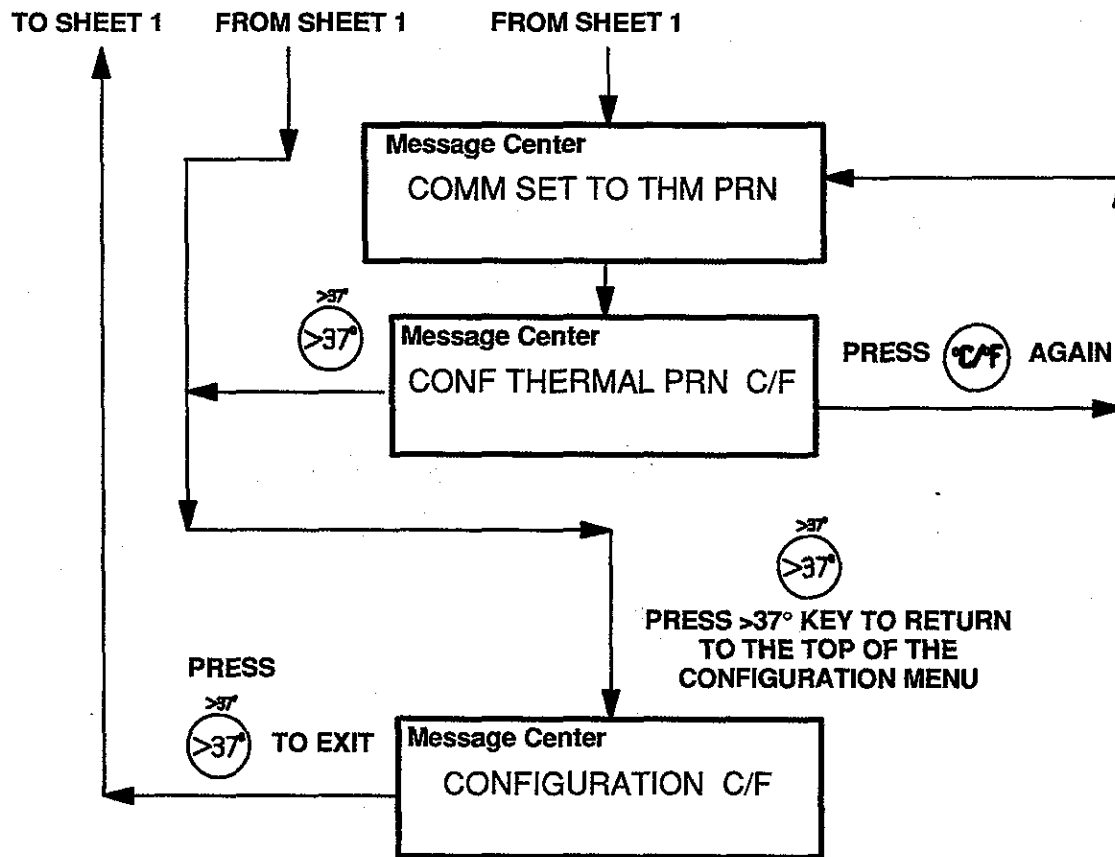


## CONFIGURATION FOR A REMOTE MONITOR (Sheet 2)





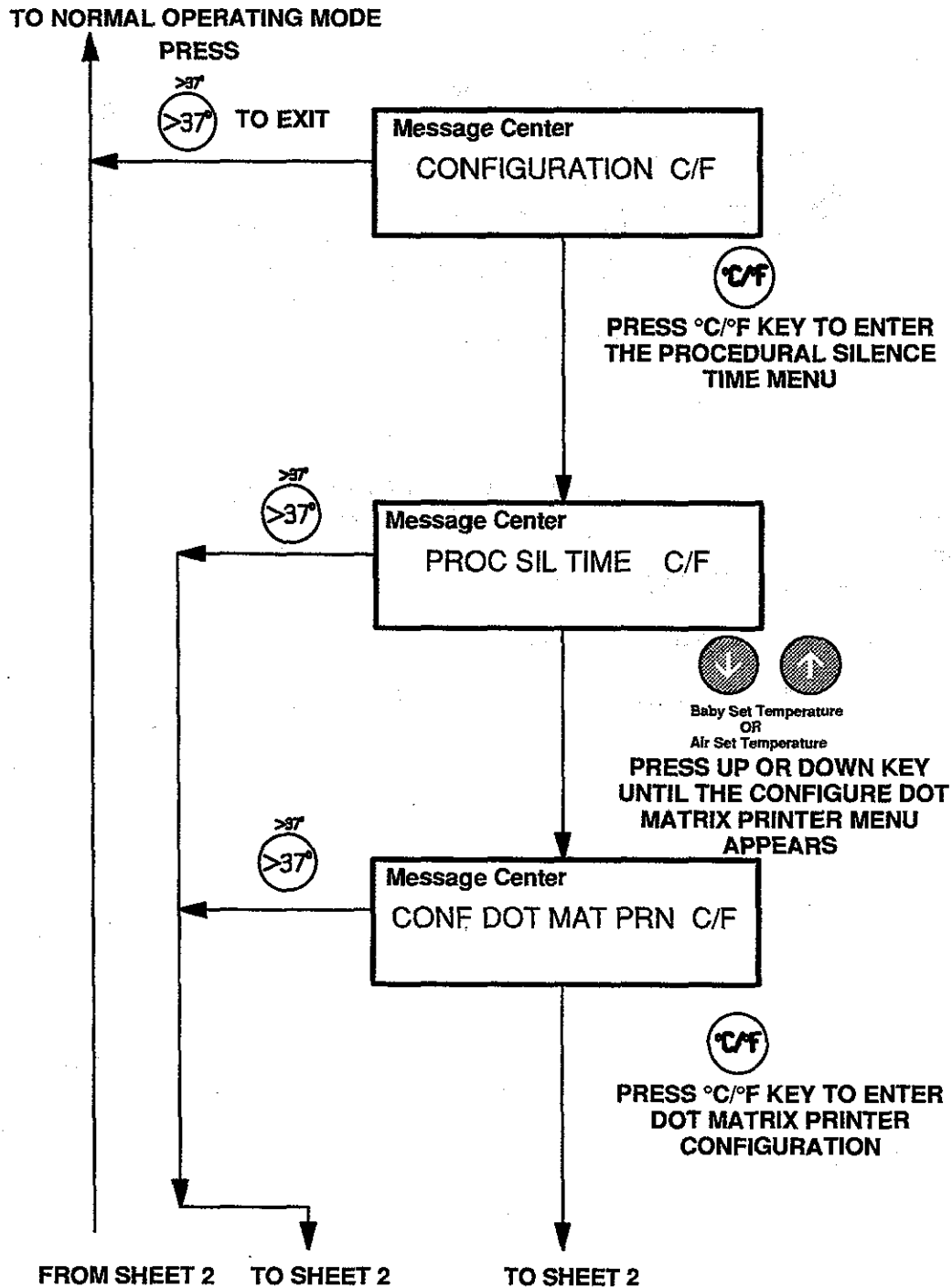
## CONFIGURATION FOR A THERMAL PRINTER (Sheet 2)



### 5.3.10 CONFIGURING THE CONTROLLER TO A DOT MATRIX PRINTER

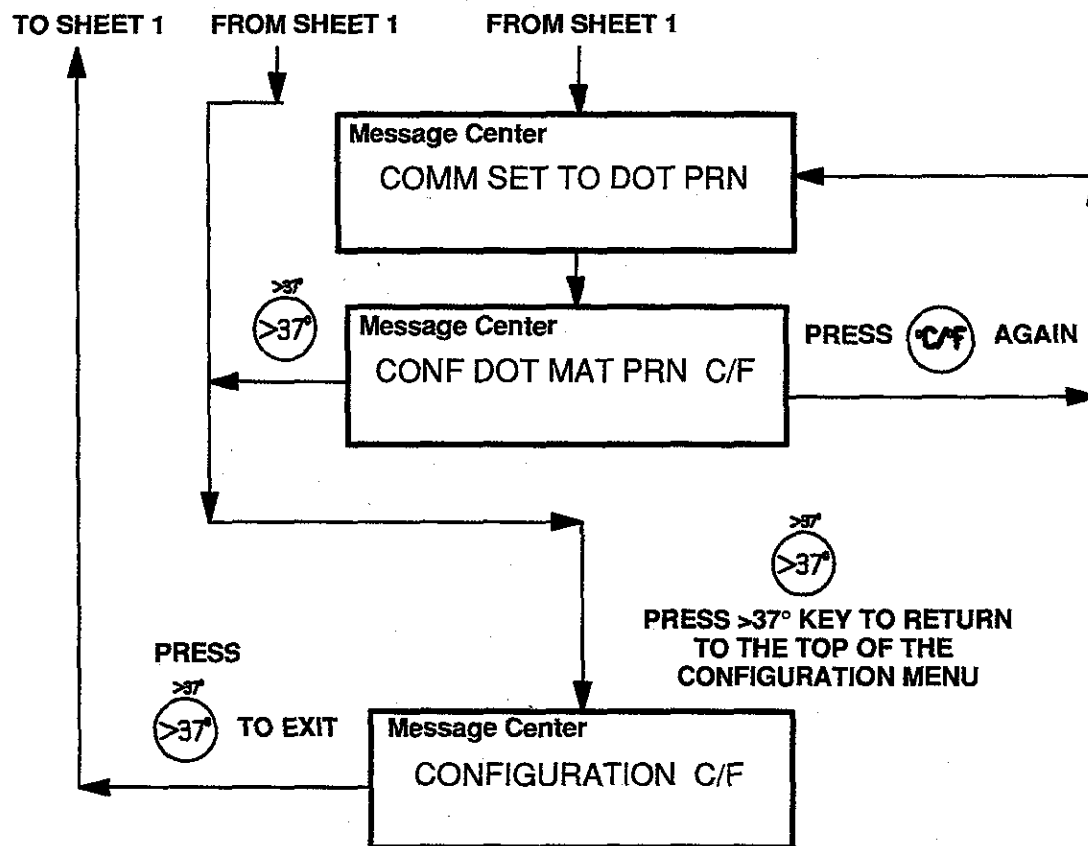
To configure the **SERIAL PORT** located on the Controller Side Panel to communicate with a dot matrix printer, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### CONFIGURATION FOR A DOT MATRIX PRINTER (Sheet 1)





## CONFIGURATION FOR A DOT MATRIX PRINTER (Sheet 2)

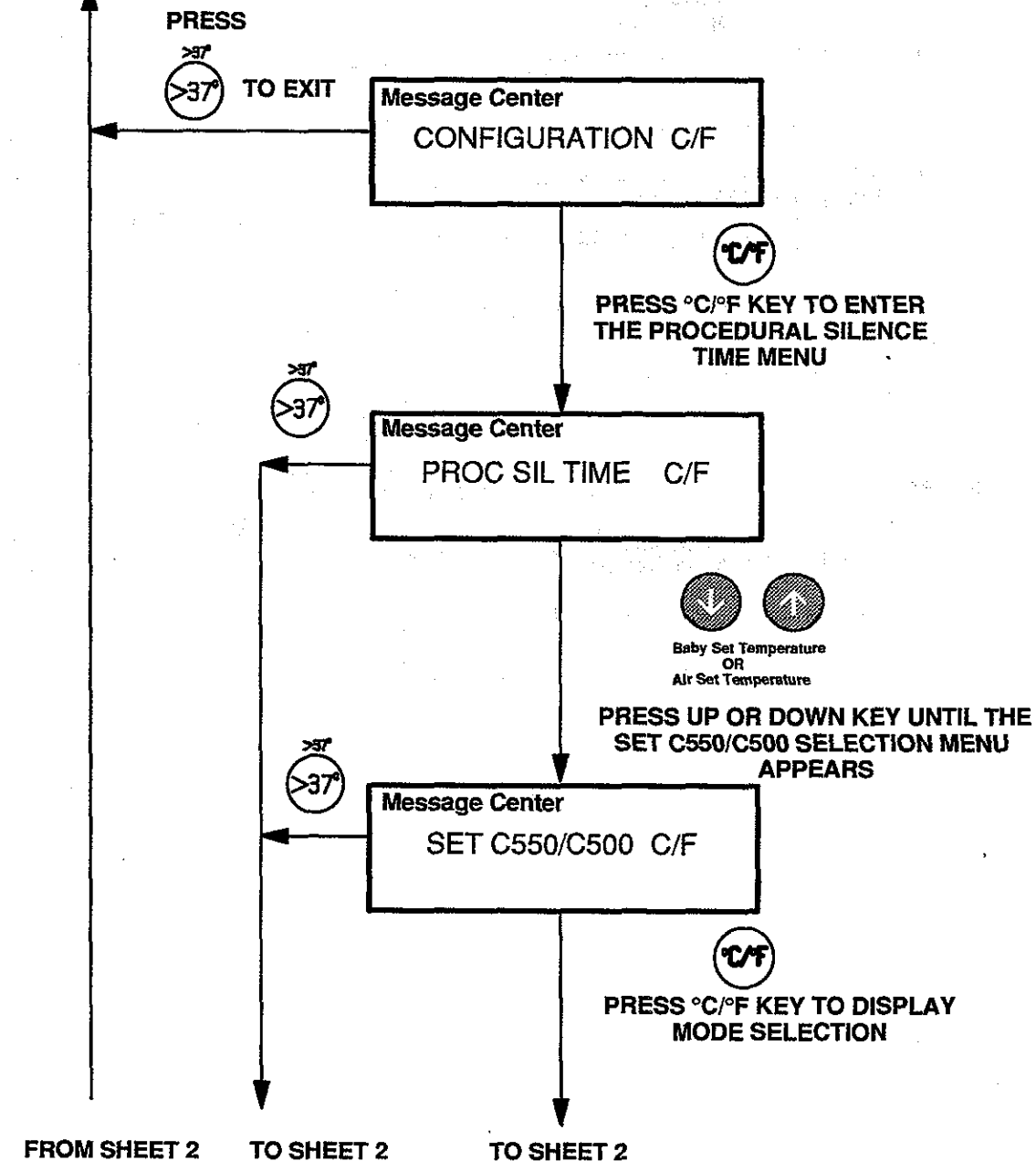


### 5.3.11 CHANGING THE CONTROLLER CONFIGURATION (C550 CONTROLLERS ONLY)

To disable the BABY MODE function of the C550 Controller, first select the Configuration Menu (refer to paragraph 5.3.1), then proceed as follows:

## DISABLING THE BABY MODE FUNCTION (Sheet 1)

TO NORMAL OPERATING MODE

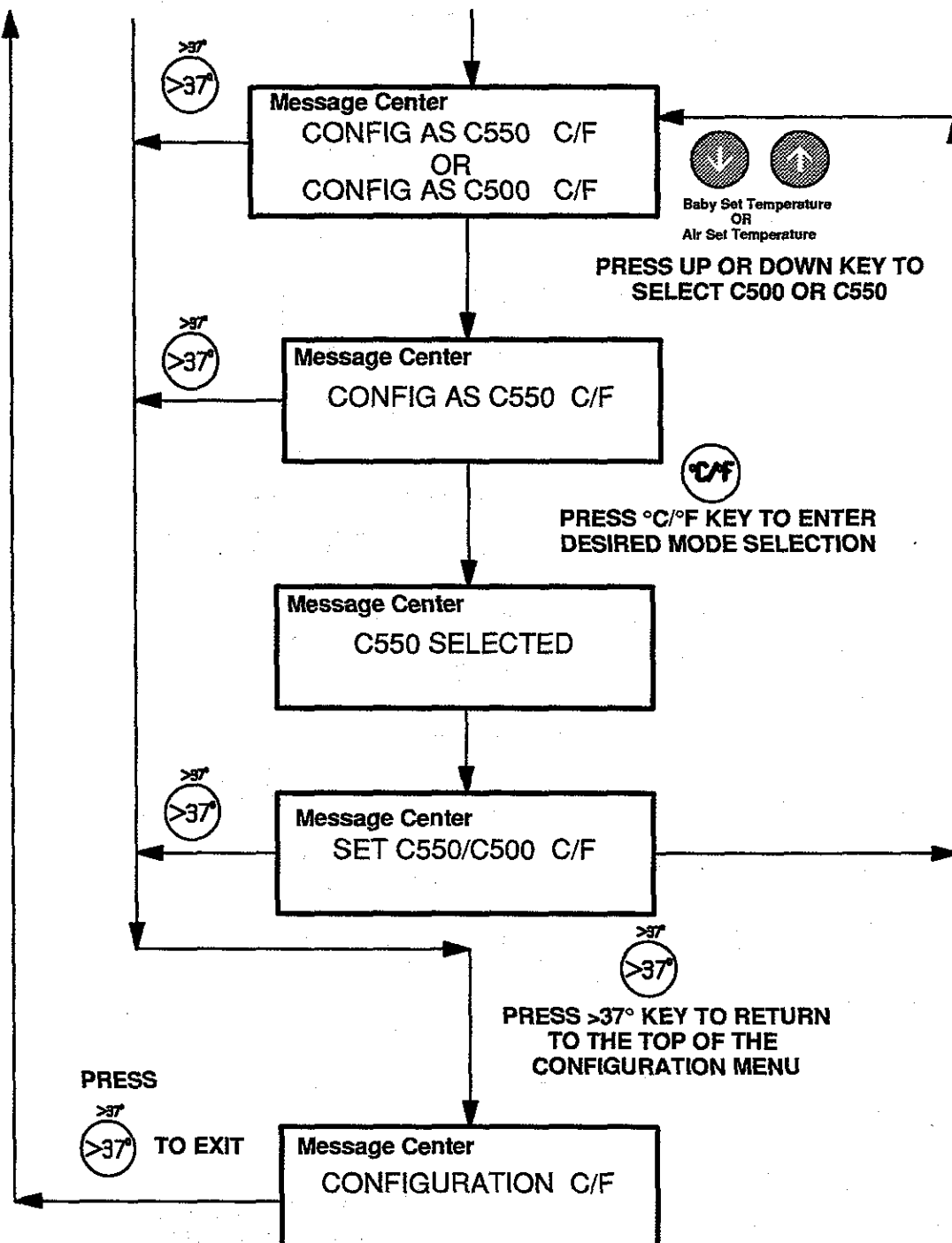


## DISABLING THE BABY MODE FUNCTION (Sheet 2)

TO SHEET 1

FROM SHEET 1

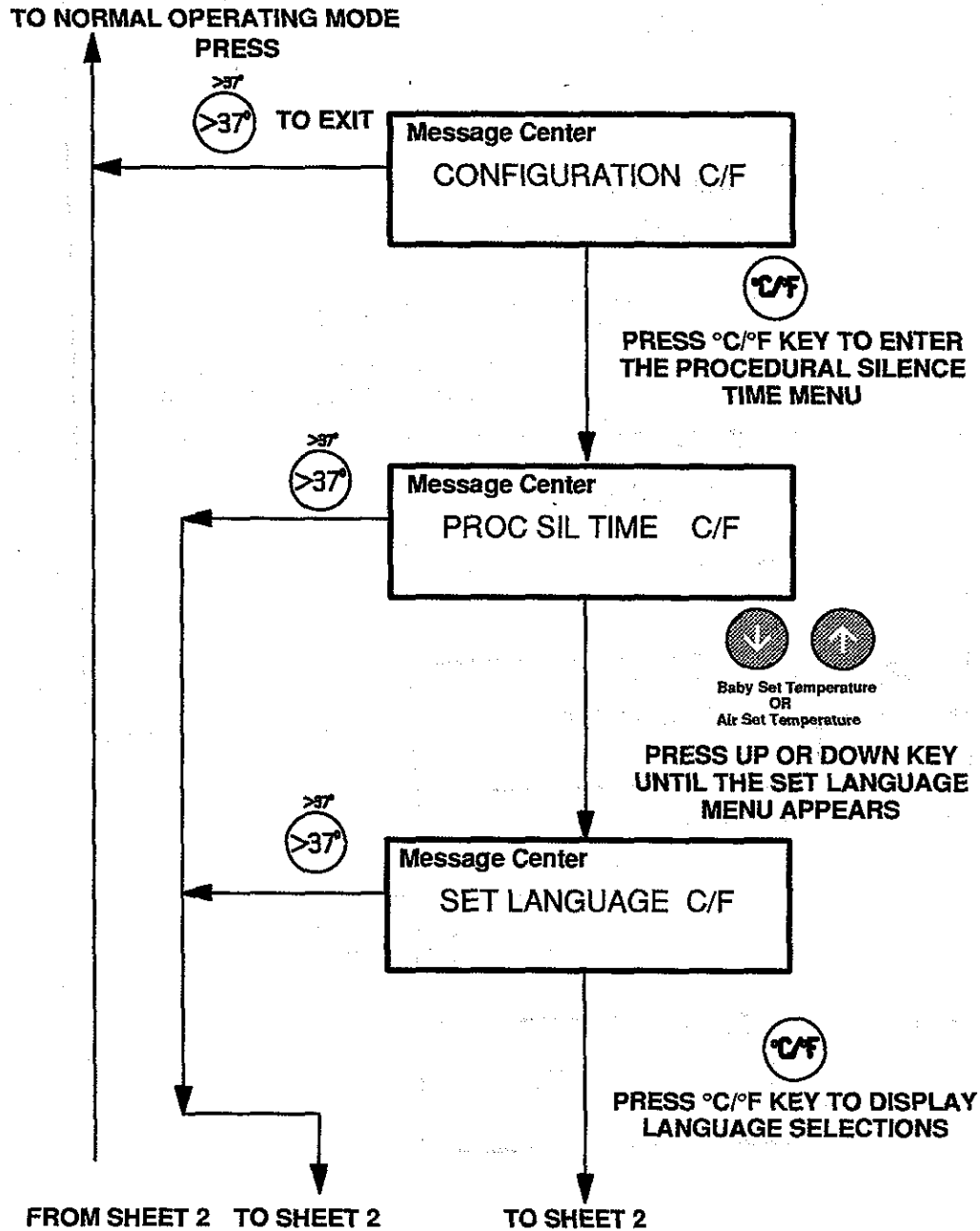
FROM SHEET 1



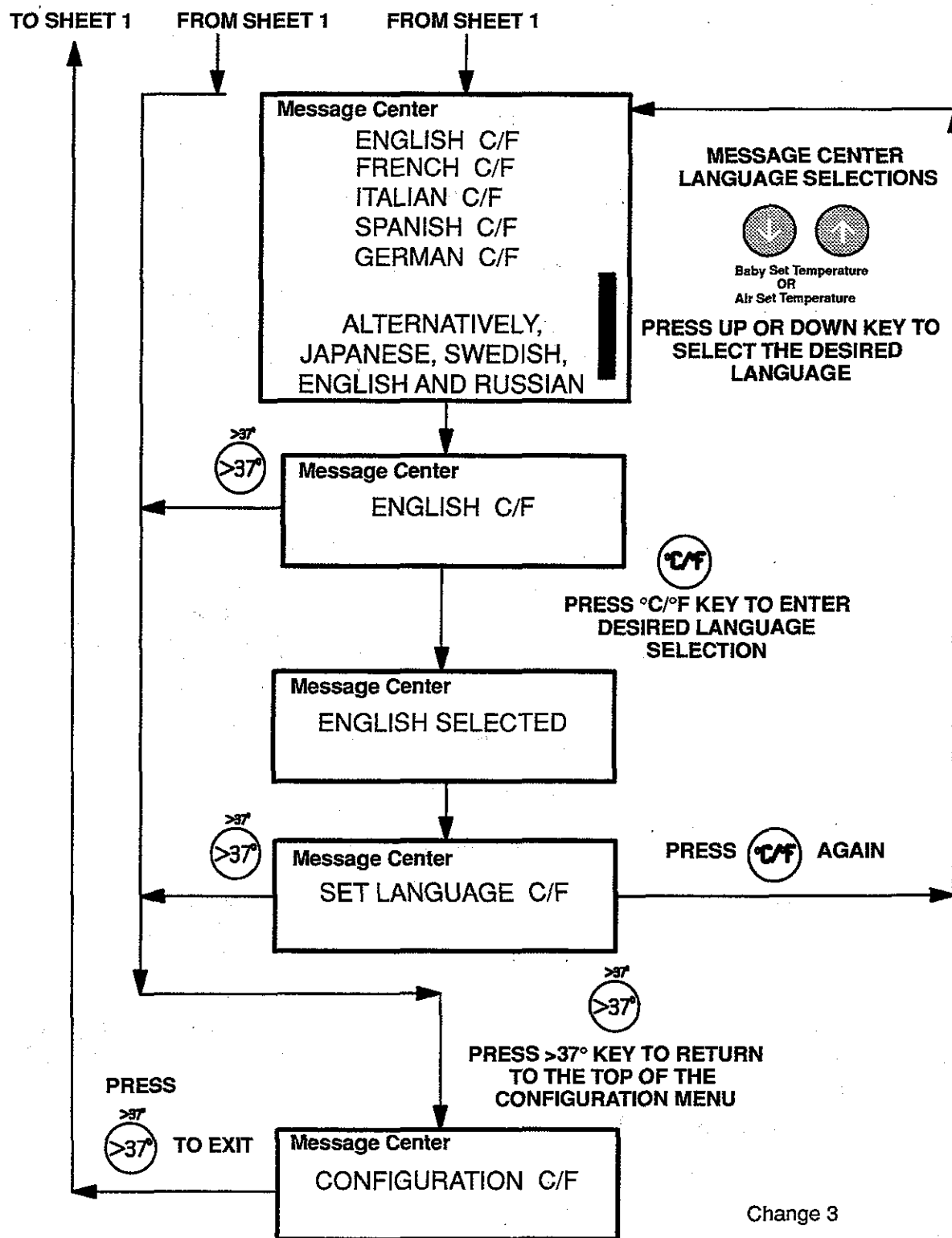
### 5.3.12 SELECTING A CONTROLLER MESSAGE CENTER LANGUAGE

The Controller Message Center has the capability to present messages in several different languages. These languages include English, French, Spanish, Italian, German and Russian. Alternately, Japanese may be substituted for German and Russian. To select a language, first select the Configuration Menu (refer to Paragraph 5.3.1), then proceed as follows:

#### SELECTING A LANGUAGE (Sheet 1)



## SELECTING A LANGUAGE (Sheet 2)



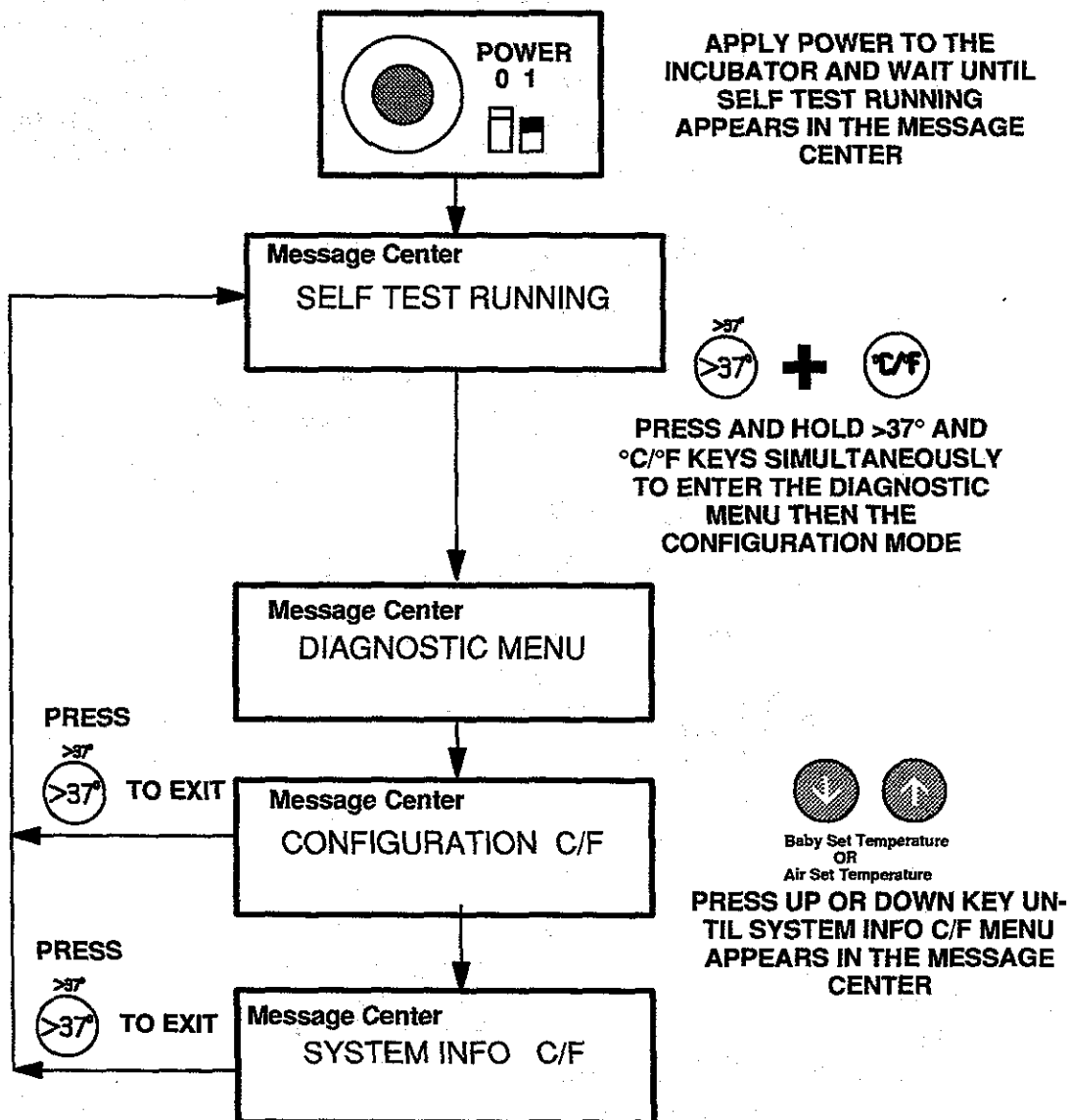
## 5.4 C500/C550 CONTROLLER SYSTEM INFORMATION MENU

### 5.4.1 SELECTING THE SYSTEM INFORMATION MENU

The System Information Menu may be selected when the SELF-TEST RUNNING Message is appearing in the Message Center.

Before attempting to enter the System Information Menu, refer to Section 3, The Message Center, and Section 4, Operation, Paragraph 4.1, Controls and Indicators of the Operator's Manual.

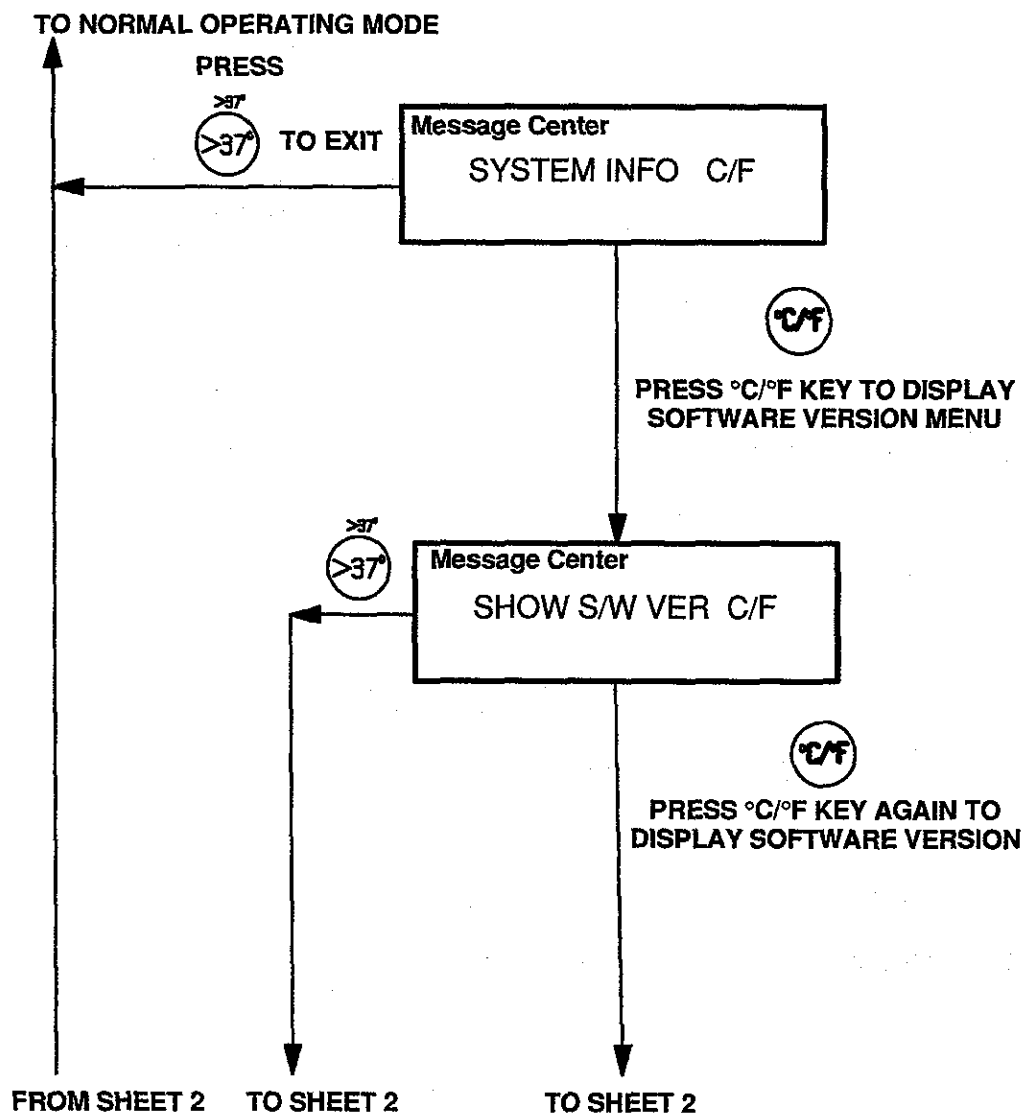
### SELECTING THE SYSTEM INFORMATION MENU



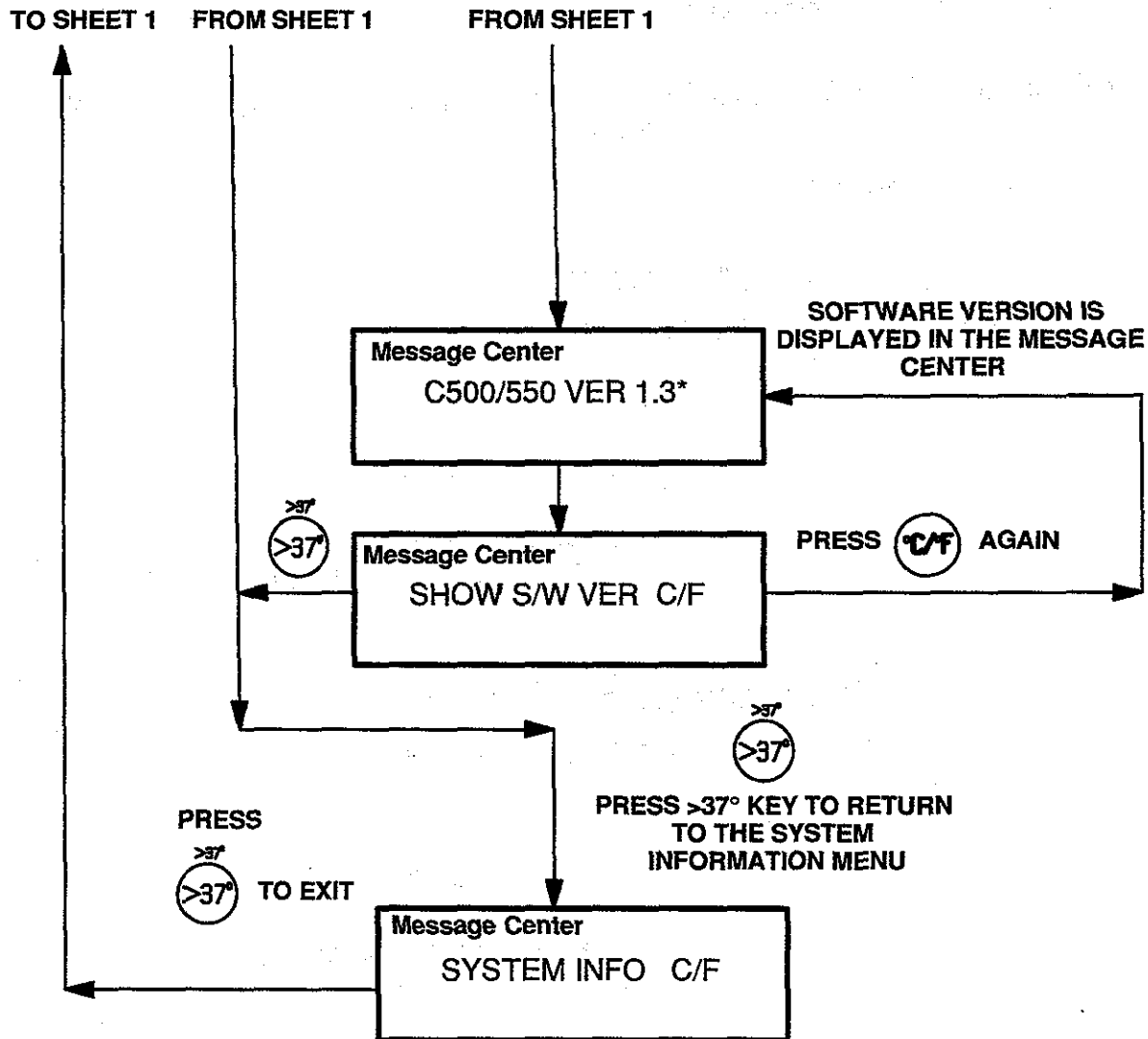
### 5.4.2 ACCESSING THE CONTROLLER SOFTWARE VERSION NUMBER

So that our service department may serve you better, please have the Controller Software Version number available when inquiring about operation or technical information. To access the System Software Version Number, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

### ACCESSING THE CONTROLLER SOFTWARE VERSION NUMBER (Sheet 1)



## ACCESSING THE CONTROLLER SOFTWARE VERSION NUMBER (Sheet 2)



\*NOTE: THE SOFTWARE VERSION OF YOUR CONTROLLER MAY DIFFER.

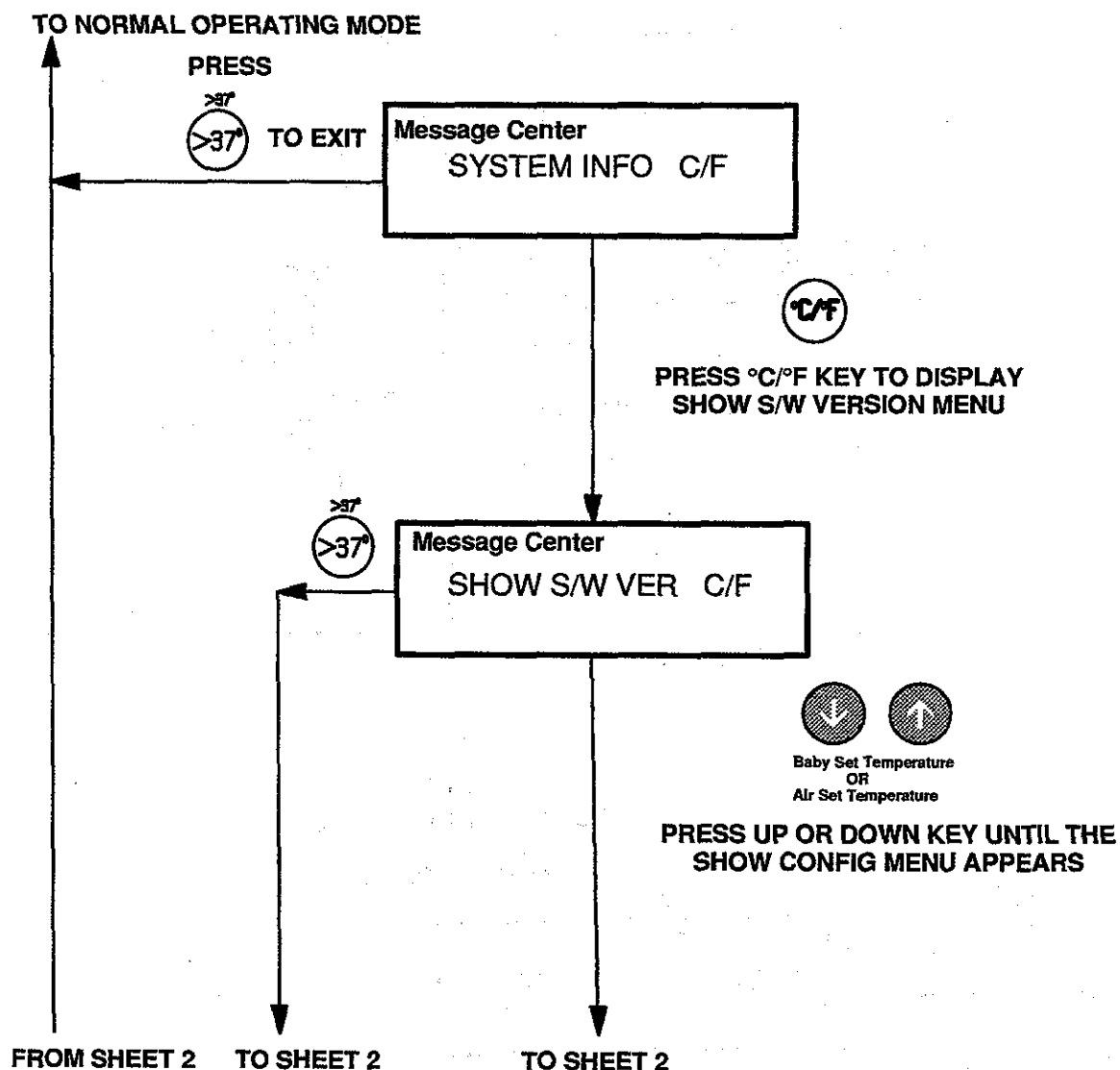


### 5.4.3 ACCESSING THE CONTROLLER SHOW CONFIGURATION MENU

The Controller Show Configuration Menu will display all the Configurable Incubator Parameters and what they are currently set to. Refer to Section 2, Paragraph 2.6 for a complete explanation of these parameters and Paragraph 5.3 for procedures to change their settings. To access the the Show Configuration Menu, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

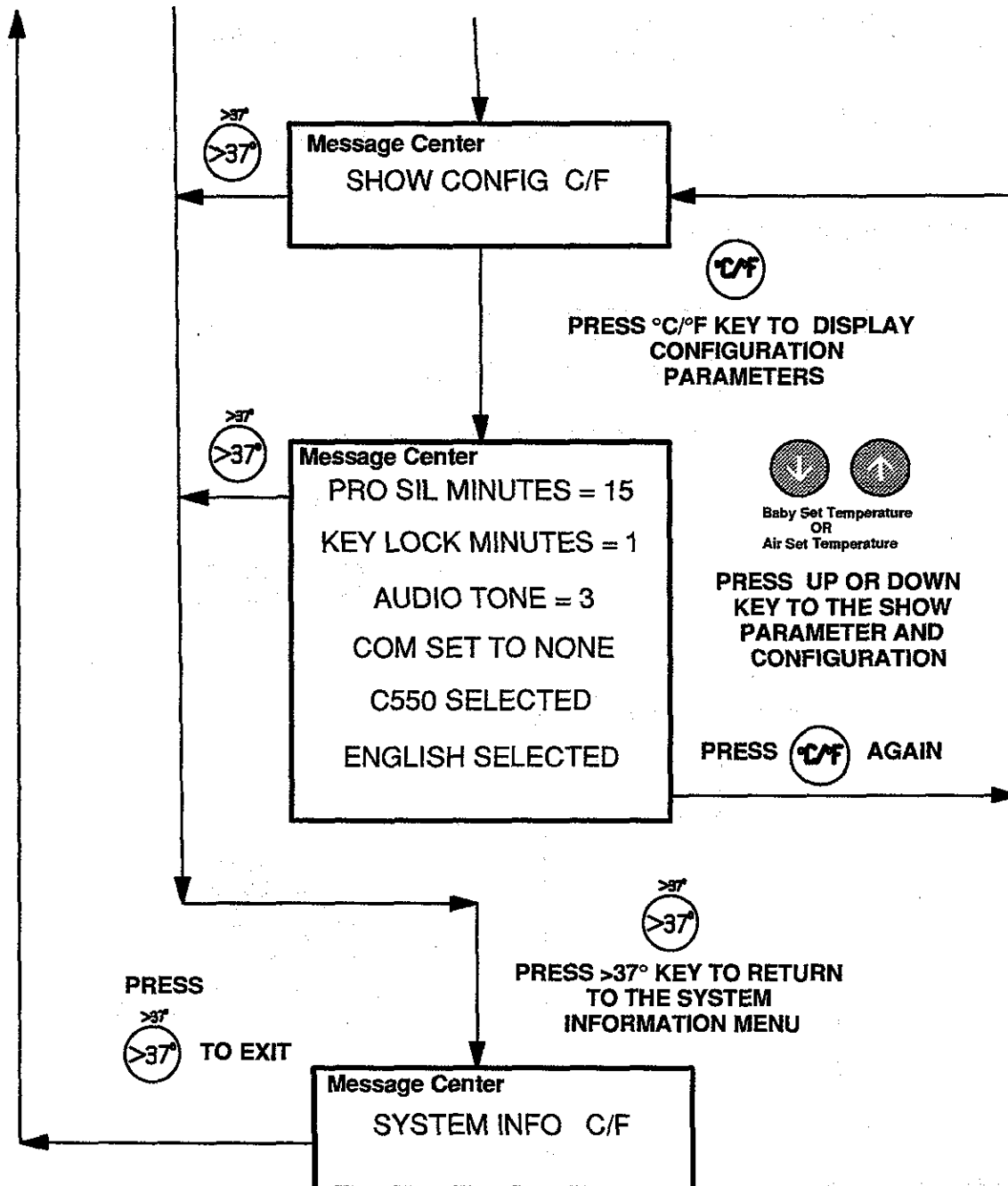
**NOTE:** This flowchart lists the Configurable Parameters along with their factory default setting. If it desired to obtain a print out of these parameters, refer to Paragraph 5.4.4 below.

## ACCESSING THE CONTROLLER SHOW CONFIG MENU (Sheet 1)



## ACCESSING THE CONTROLLER SHOW CONFIG MENU (Sheet 2)

TO SHEET 1    FROM SHEET 1    FROM SHEET 1

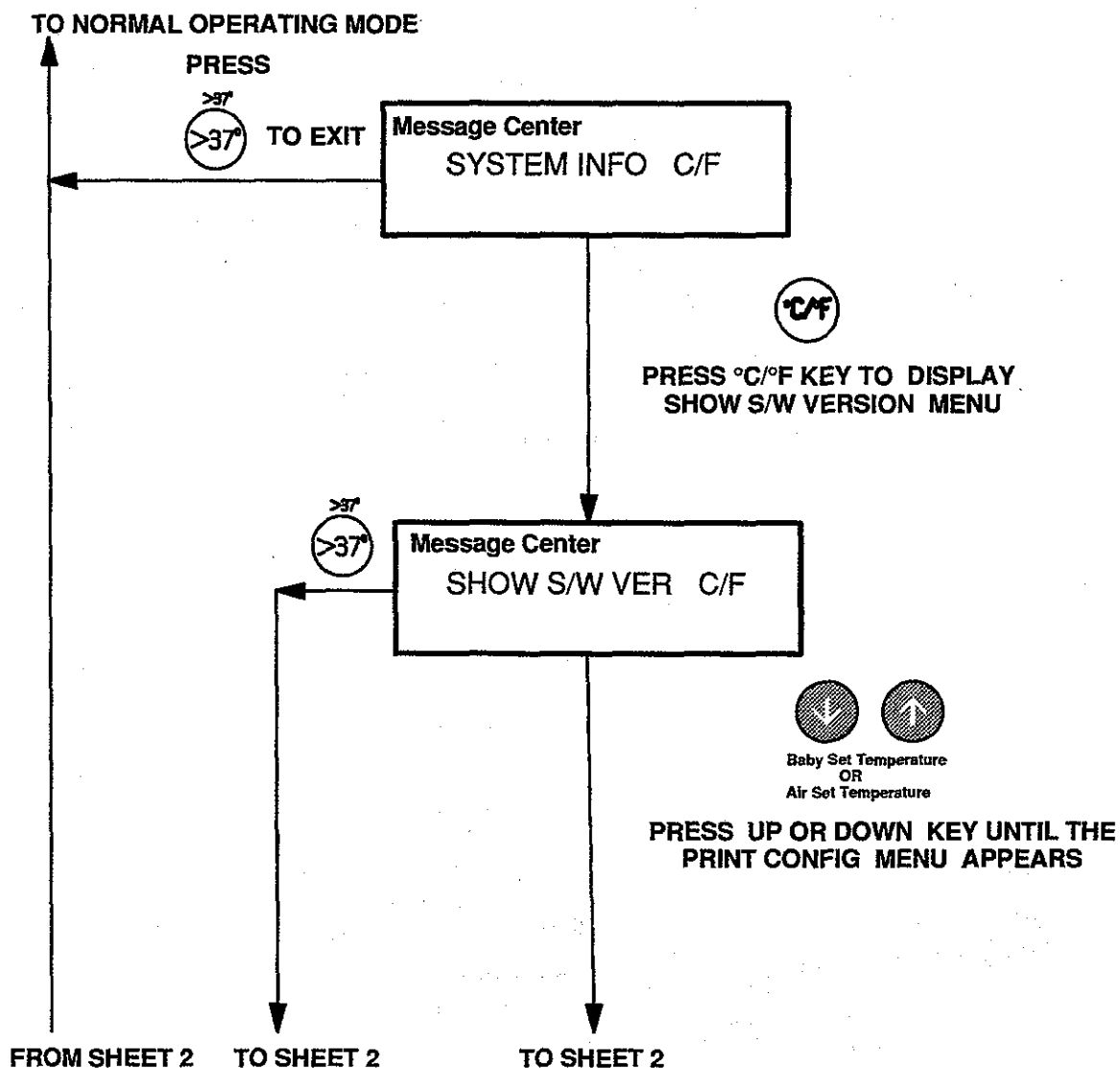


#### 5.4.4 ACCESSING THE CONTROLLER PRINT CONFIGURATION MENU

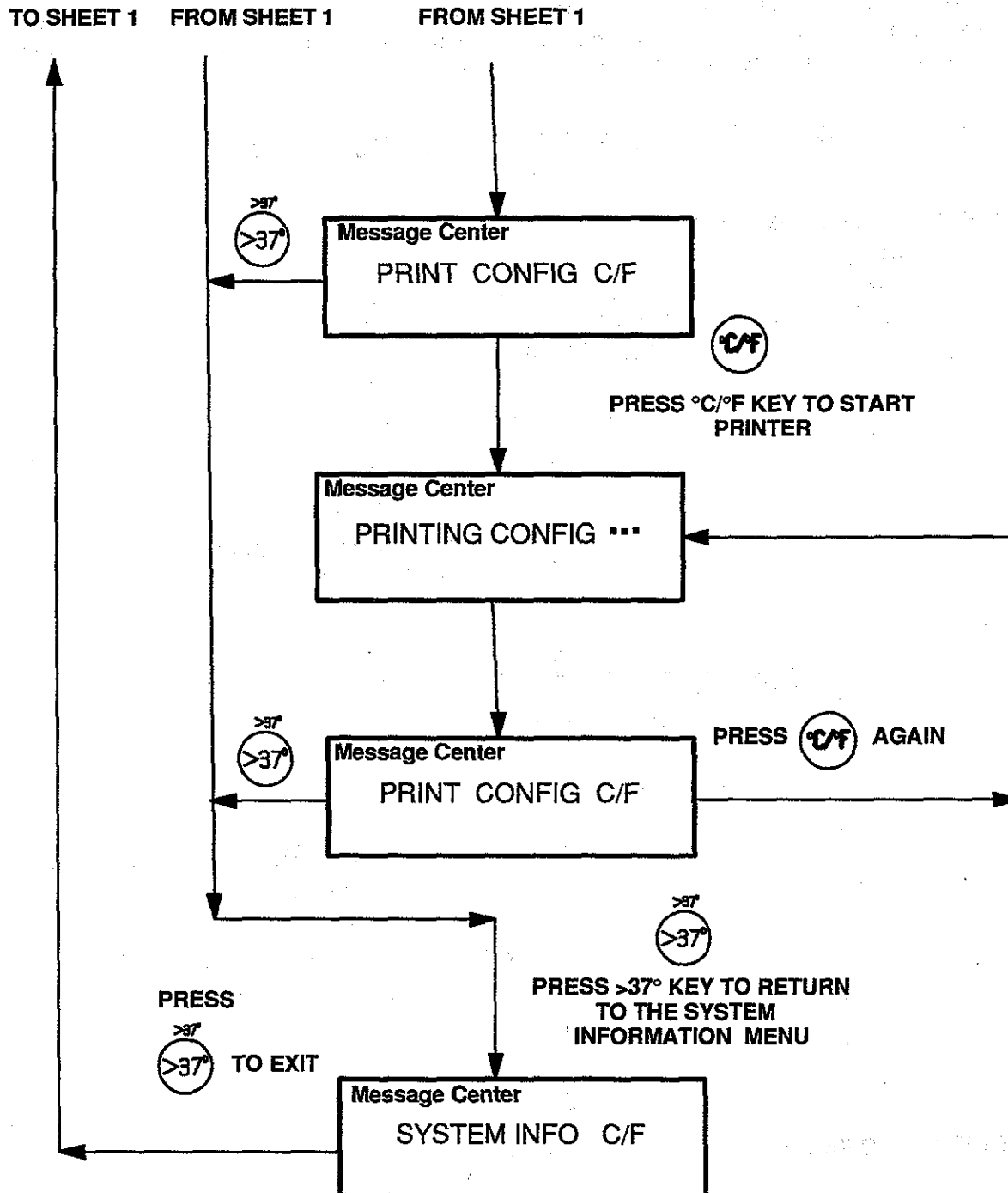
**NOTE:** This Menu will appear only when the **SERIAL PORT** located on the Incubator Side Pane has been configured to communicate with a Thermal or a Dot Matrix Printer.

The Controller Print Configuration Menu enables the user to print out the Configurable Incubator Parameters described in Paragraph 5.4.3 above. To access the the Print Configuration Menu, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

### ACCESSING THE PRINT CONFIG MENU (Sheet 1)



## ACCESSING THE PRINT CONFIG MENU (Sheet 2)

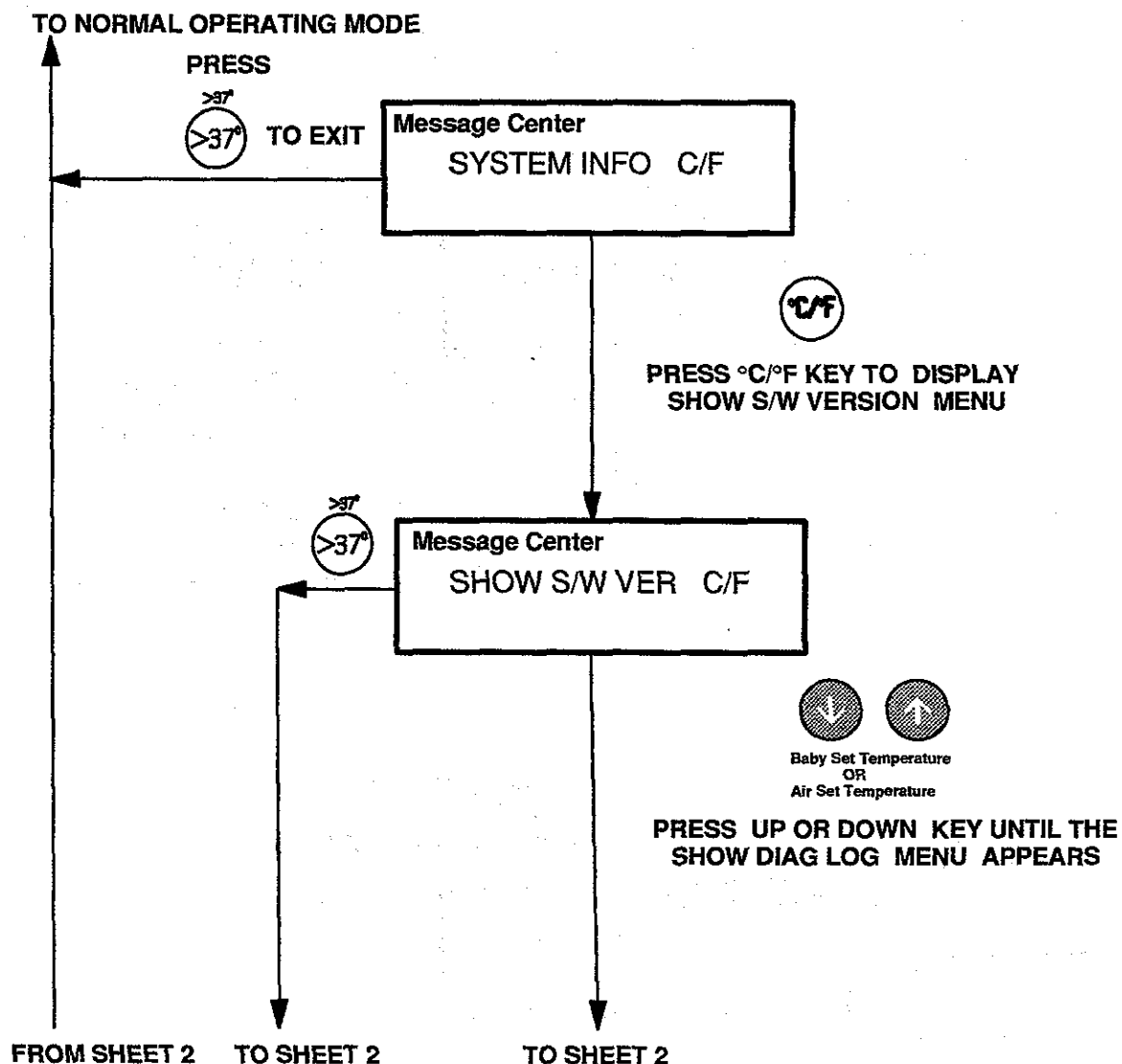


### 5.4.5 ACCESSING THE CONTROLLER SHOW DIAGNOSTIC LOG MENU

The Diagnostic Log records all internal malfunctions that generated a NEEDS SERVICE NOW Message in the Controller Message Center. The notation of the failure will remain in the log until the log is cleared (Refer to Paragraph 5.4. 7) even though the malfunction has been corrected. In addition, if a printer is available, a print out of the contents of the Diagnostic Log can be obtained by entering the PRINT DIAG LOG Menu (refer to paragraph 5.4.6).

For a listing of the Internal malfunctions that will appear in the Log along with corrective actions, refer to Paragraph 5.6, Troubleshooting.

### ACCESSING THE SHOW DIAG LOG MENU (Sheet 1)



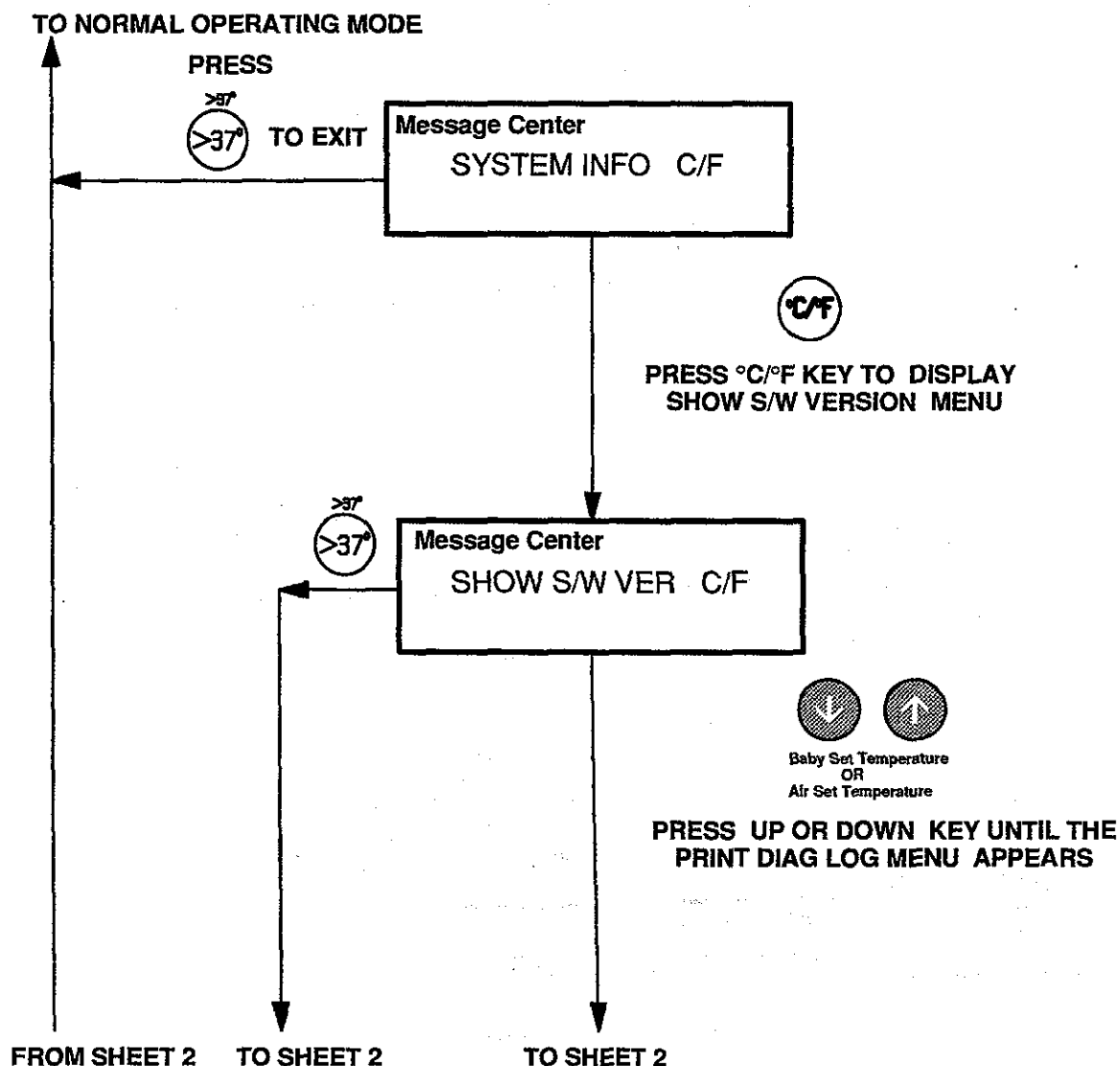


### 5.4.6 ACCESSING THE CONTROLLER PRINT DIAGNOSTIC LOG MENU

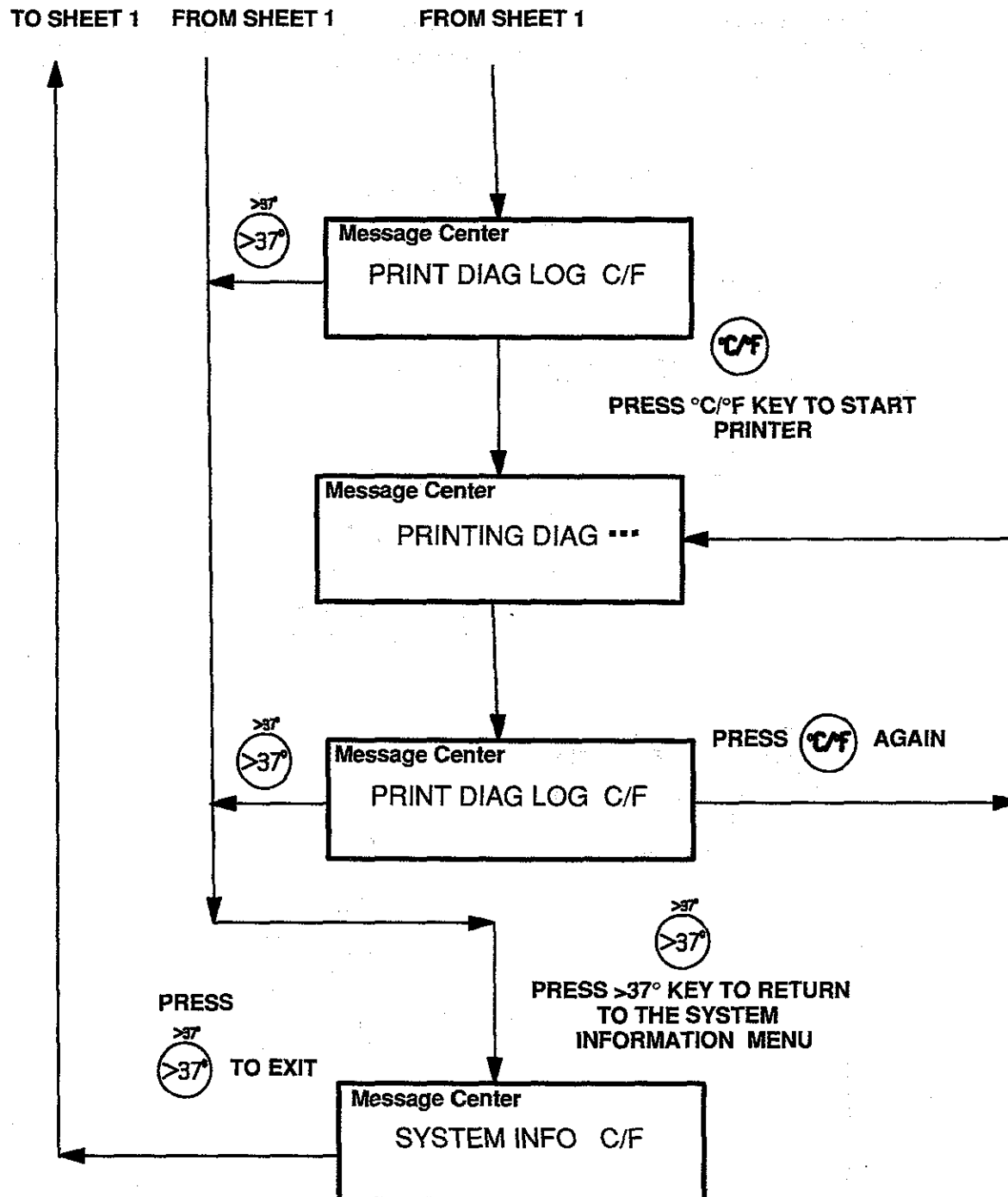
**NOTE:** This Menu will appear only when the **SERIAL PORT** located on the Incubator Side Pane has been configured to communicate with a Thermal or a Dot Matrix Printer.

The Controller Print Diagnostic Menu enables the user to print out the contents of the Diagnostic Menu described in Paragraph 5.4.4 above. To access the the Print Diagnostic Menu, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

### ACCESSING THE PRINT DIAG LOG MENU (Sheet 1)



## ACCESSING THE PRINTER CONFIG MENU (Sheet 2)



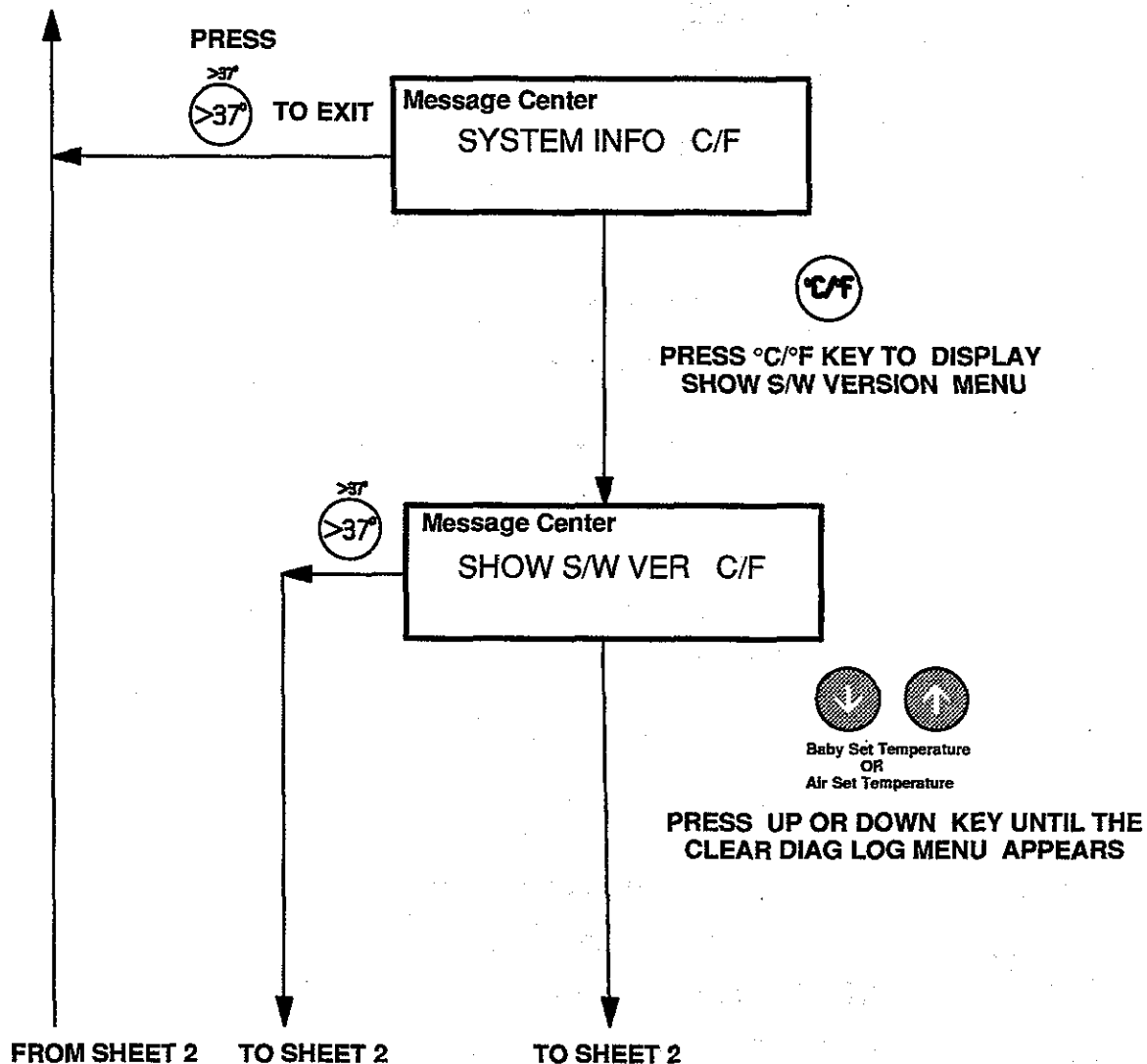


#### 5.4.7 ACCESSING THE CONTROLLER CLEAR DIAGNOSTIC LOG

The Controller Clear Diagnostic Log enables the user to purge the contents of the Diagnostic Log described in Paragraph 5.4.4 above. To access the the Clear Diagnostic Log, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

### ACCESSING THE CLEAR DIAG LOG (Sheet 1)

TO NORMAL OPERATING MODE



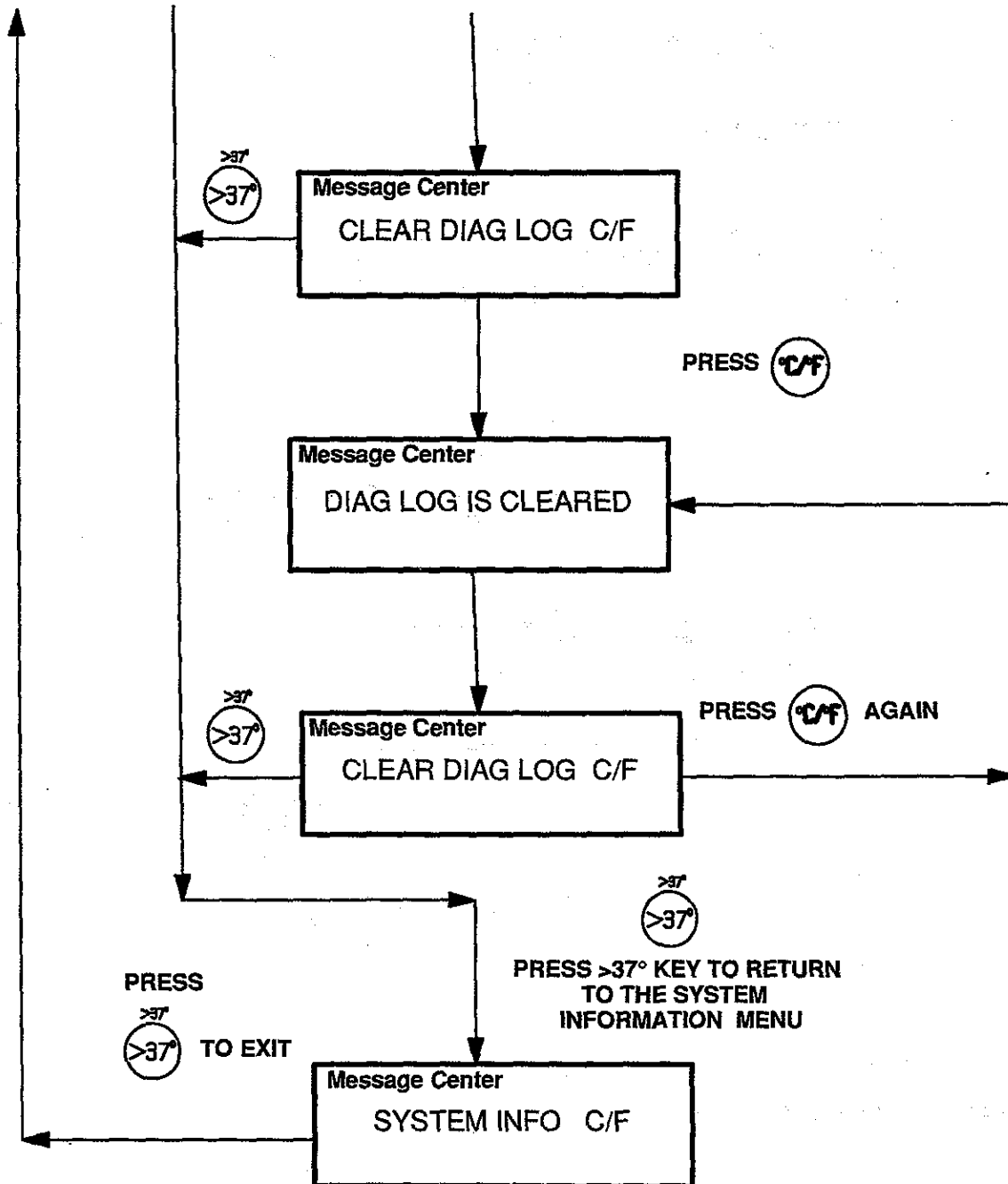
Change 1

## ACCESSING THE CLEAR DIAG LOG CONFIG (Sheet 2)

TO SHEET 1

FROM SHEET 1

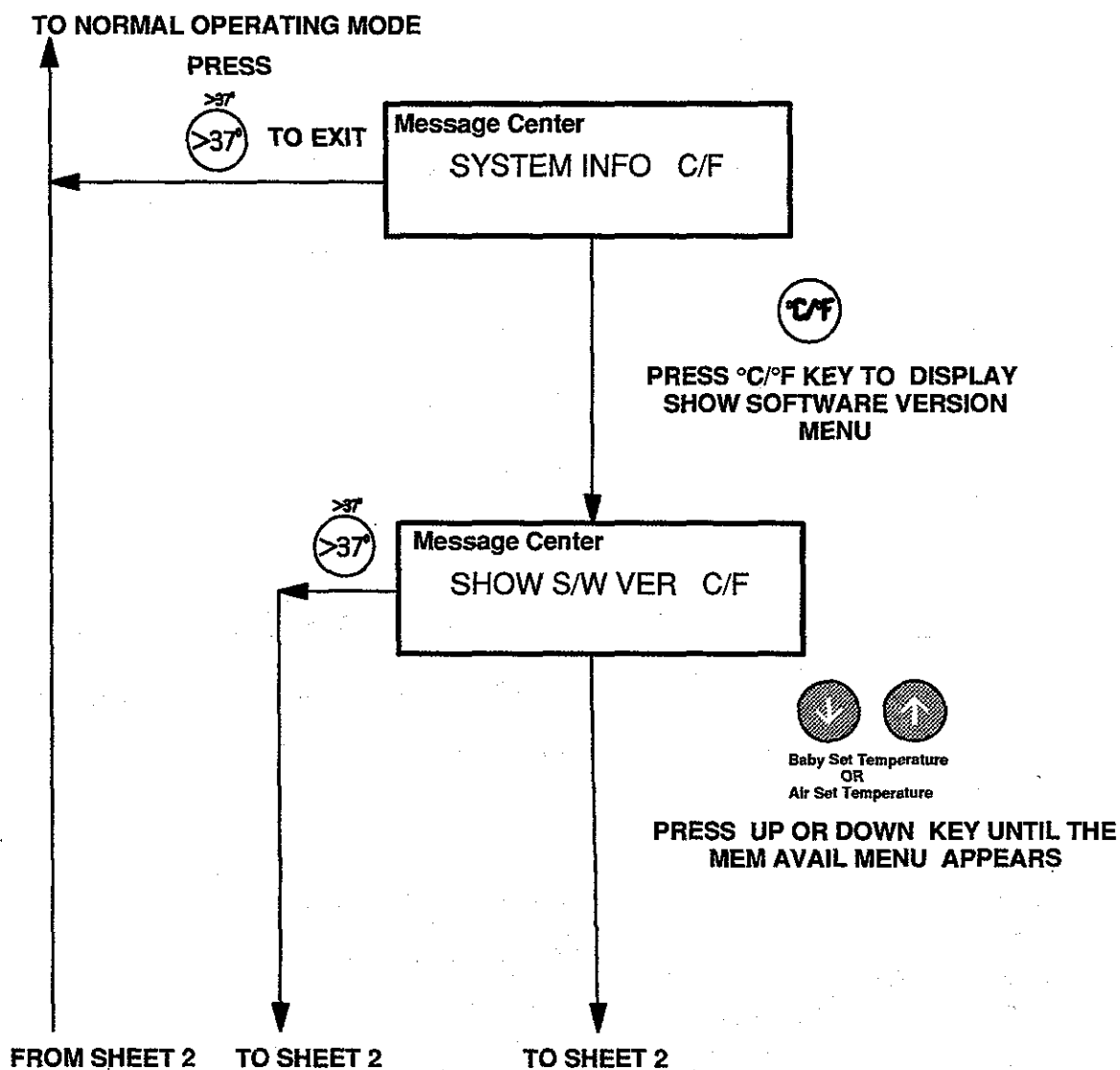
FROM SHEET 1



Change 1

**5.4.8 ACCESSING THE CONTROLLER MEMORY AVAILABLE MENU**

The Controller Memory Available Menu presents the user with the percentage of memory available in the E2 PROM of the processor chip. In the unlikely event that the memory capacity falls below 50%, the processor chip on the Main Controller Board should be replaced. To access the Memory Available Menu, first select the System Information Menu (refer to Paragraph 5.4.1), then proceed as follows:

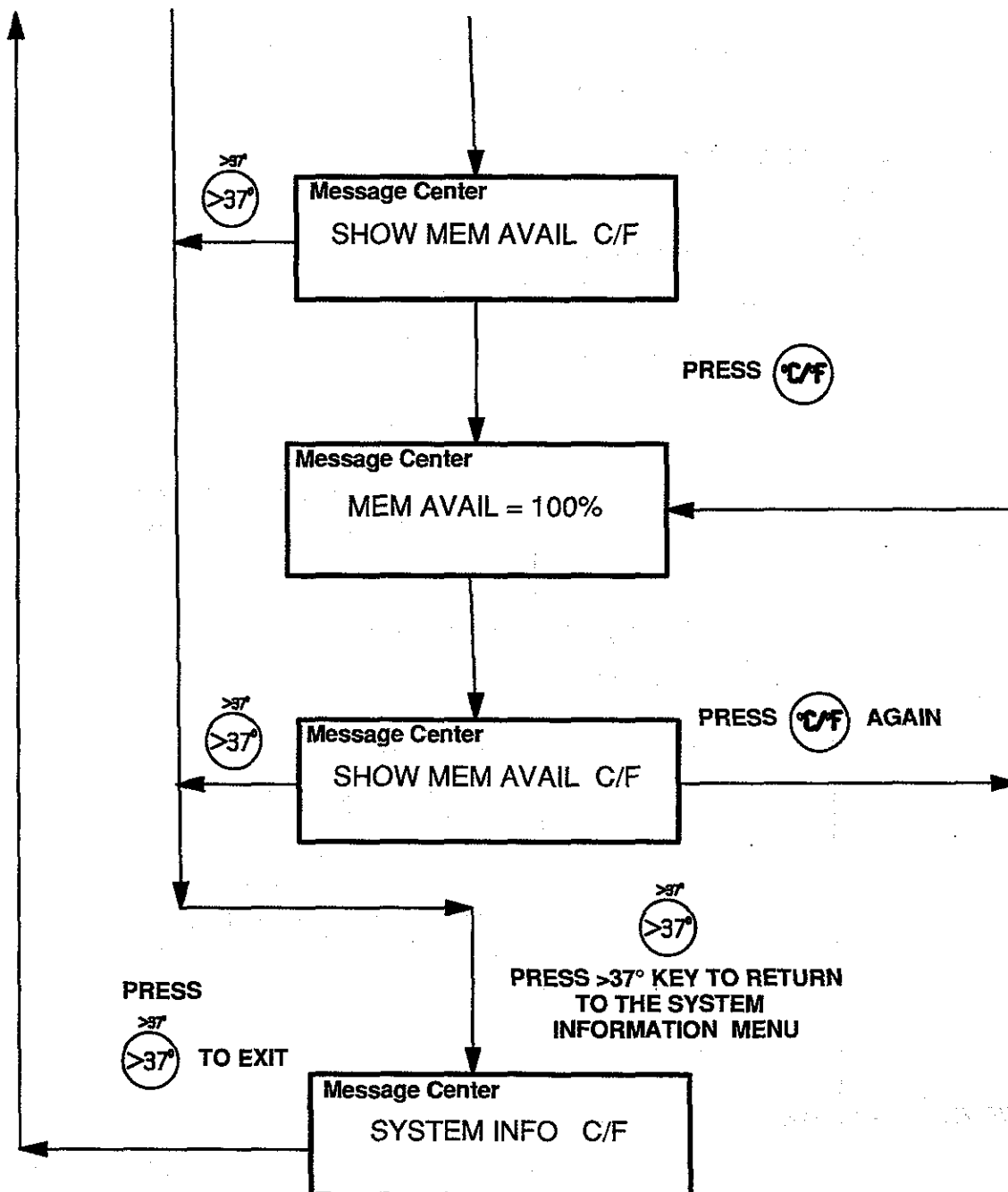
**ACCESSING THE MEM AVAIL MENU**  
(Sheet 1)

## ACCESSING THE MEM AVAIL MENU (Sheet 2)

TO SHEET 1

FROM SHEET 1

FROM SHEET 1



## 5.5 TEST AND CALIBRATION

### 5.5.1 GENERAL

Test and Calibration of the Controller is accomplished by use of the Test System Menu (refer to paragraph 5.5.3). The equipment should be completely tested and calibrated at least annually and after any repair.

### 5.5.2 TEST EQUIPMENT REQUIRED

The test equipment listed below is required for calibration of the Controller and performing Oxygen Concentration tests. Equivalent test equipment may be substituted.

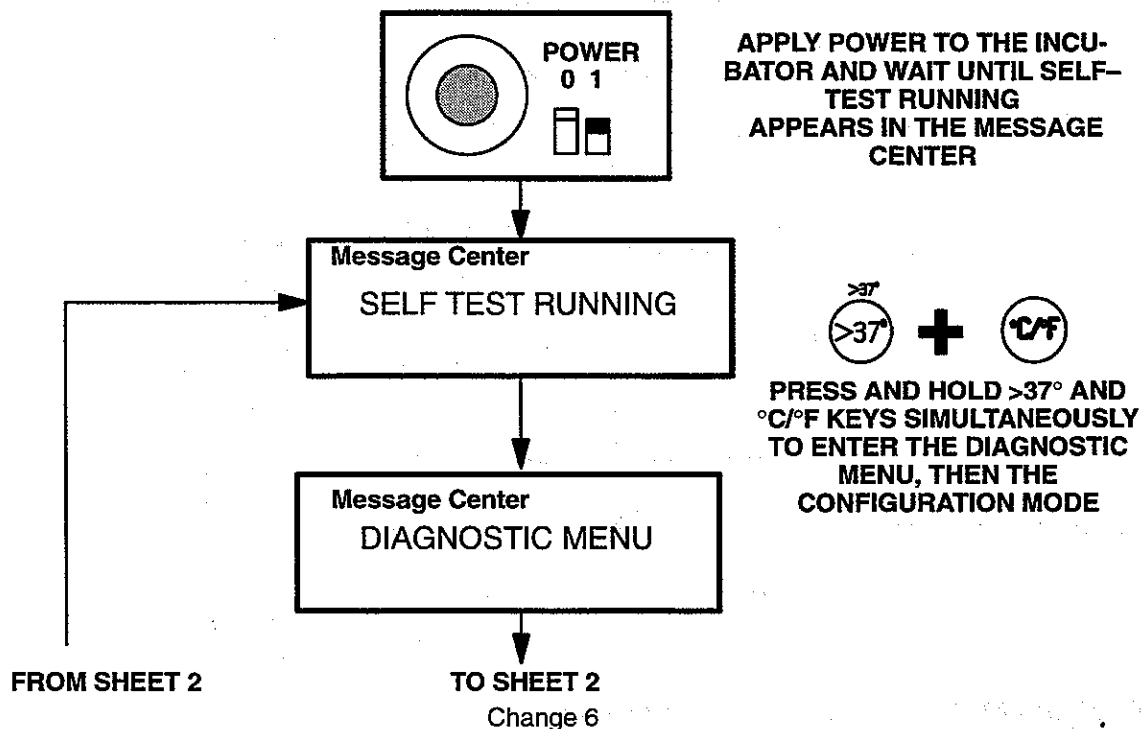
- Digital VOM, Fluke Model 8060A
- Variable Transformer, General Radio Model WSM T3AW
- Leakage Current Tester, Bio-Tek 501
- Flowmeter, Victor Model 1099-0025
- Ringout Probe, Air-Shields Part Number 68 231 20 (English Labeling), 68 231 21 (Spanish Labeling), 68 231 22 (French Labeling) or 68 231 23 (German Labeling)
- Baby Temperature Probe, Air-Shields Part Number 68 209 70

### 5.5.3 TEST SYSTEM MENU

The Test System Menu may be selected when the SELF-TEST RUNNING Message is appearing in the Message Center.

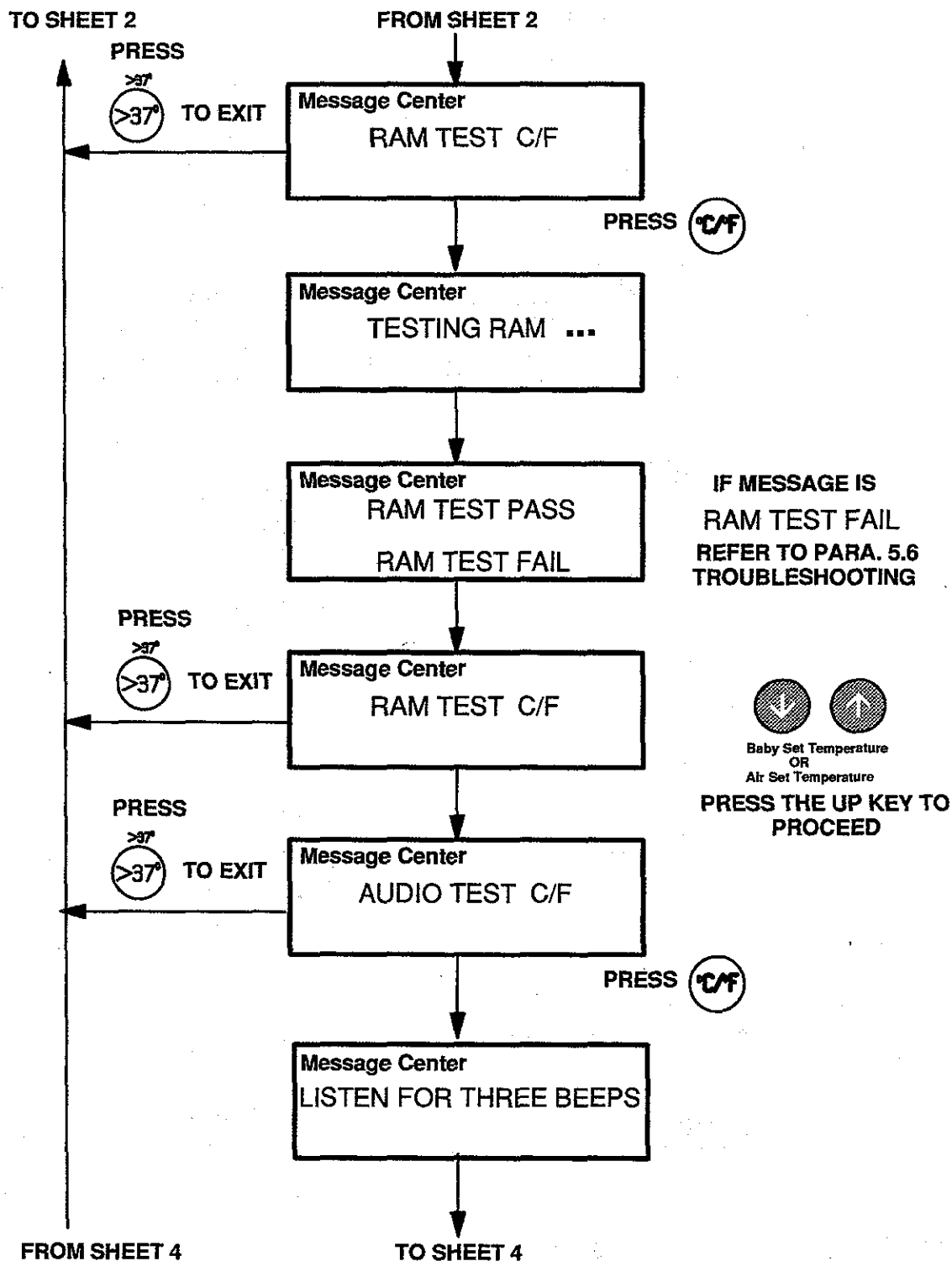
Before attempting to enter the Test System Menu, refer to Section 3, The Message Center, and Section 4, Operation, Paragraph 4.1, Controls and Indicators, of the Operator's Manual.

## THE TEST SYSTEM MENU (Sheet 1 of 13)





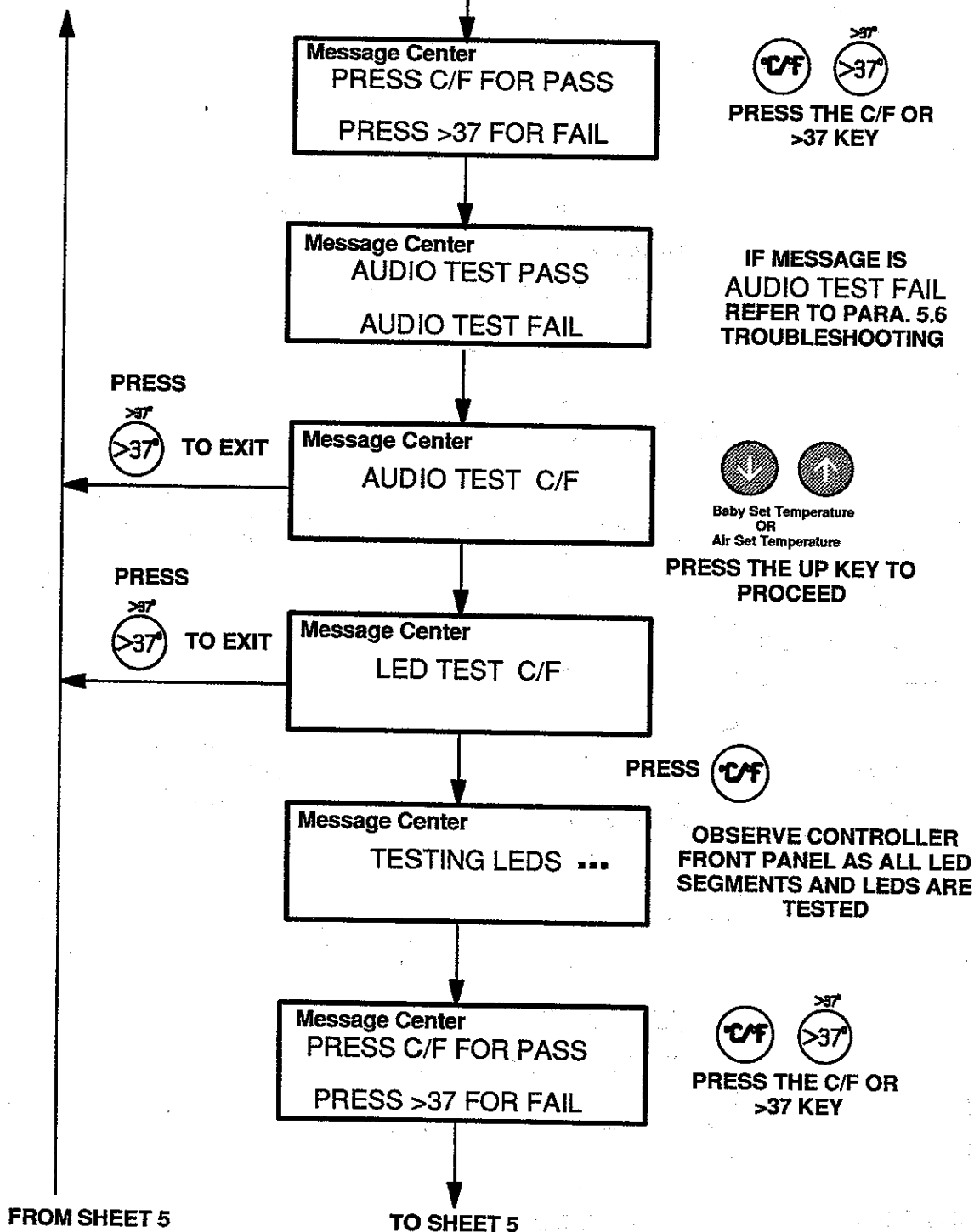
# THE TEST SYSTEM MENU (Sheet 3 of 13)



## THE TEST SYSTEM MENU (Sheet 4 of 13)

TO SHEET 3

FROM SHEET 3

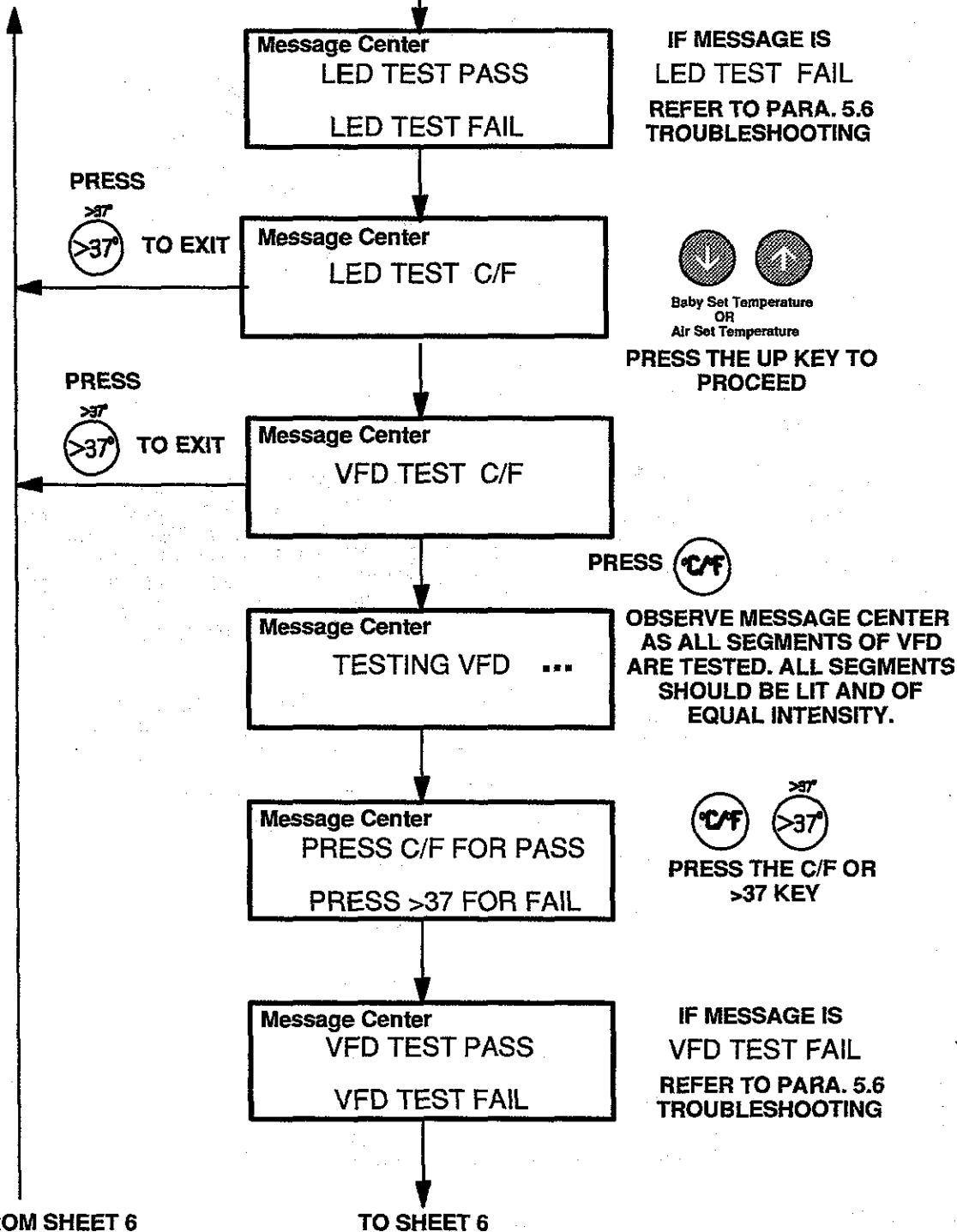




# THE TEST SYSTEM MENU (Sheet 5 of 13)

TO SHEET 4

FROM SHEET 4

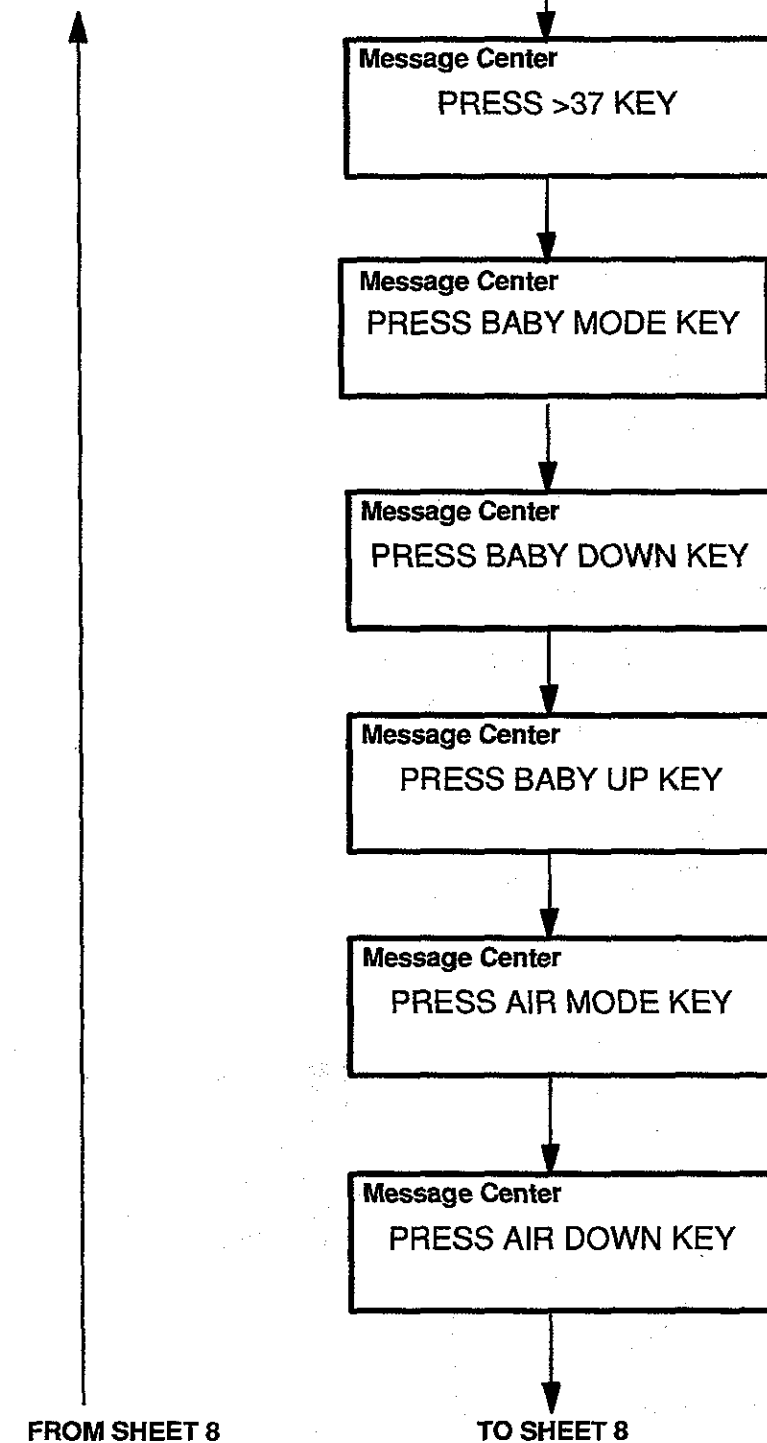




## THE TEST SYSTEM MENU (Sheet 7 of 13)

TO SHEET 6

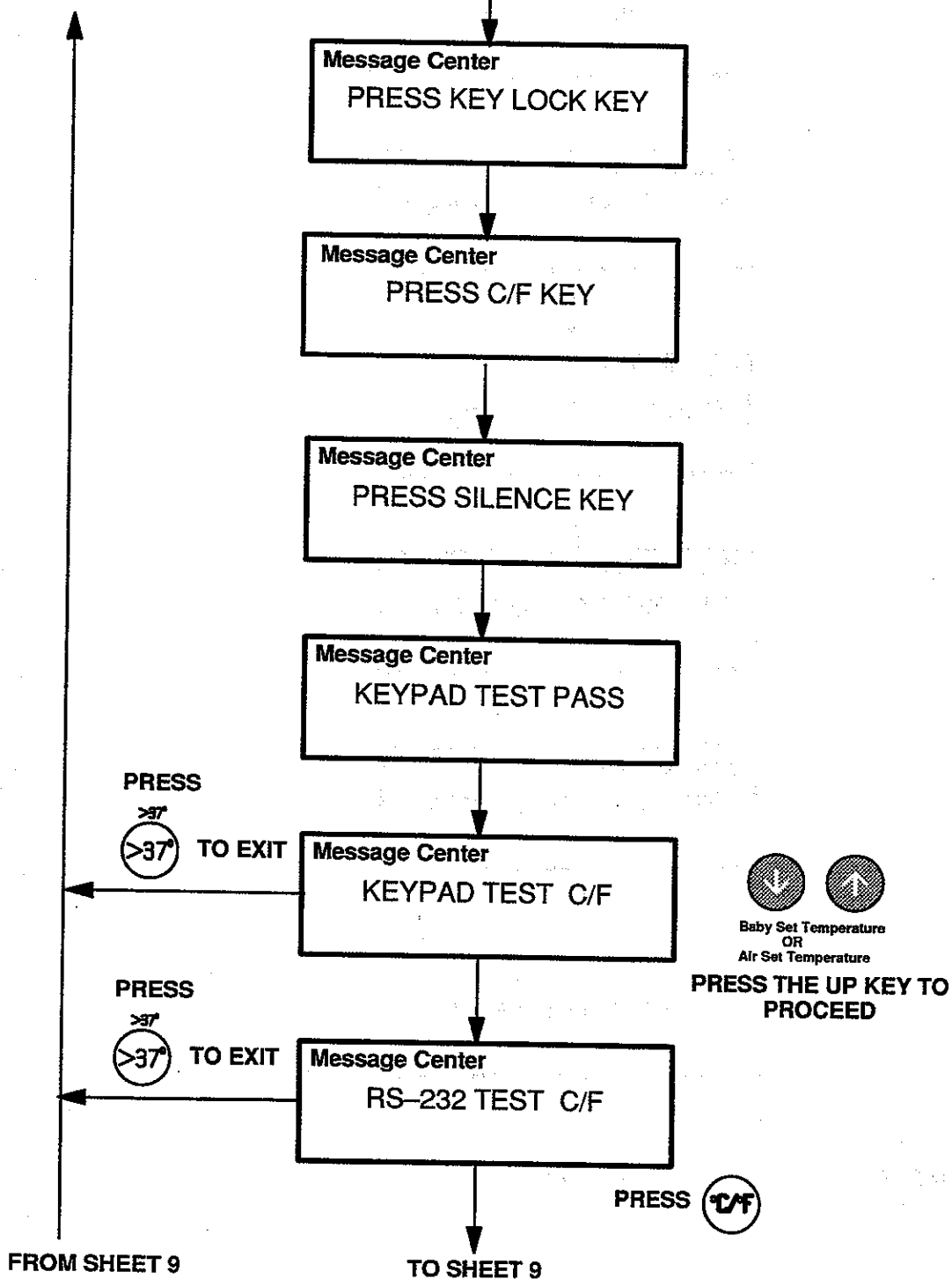
FROM SHEET 6



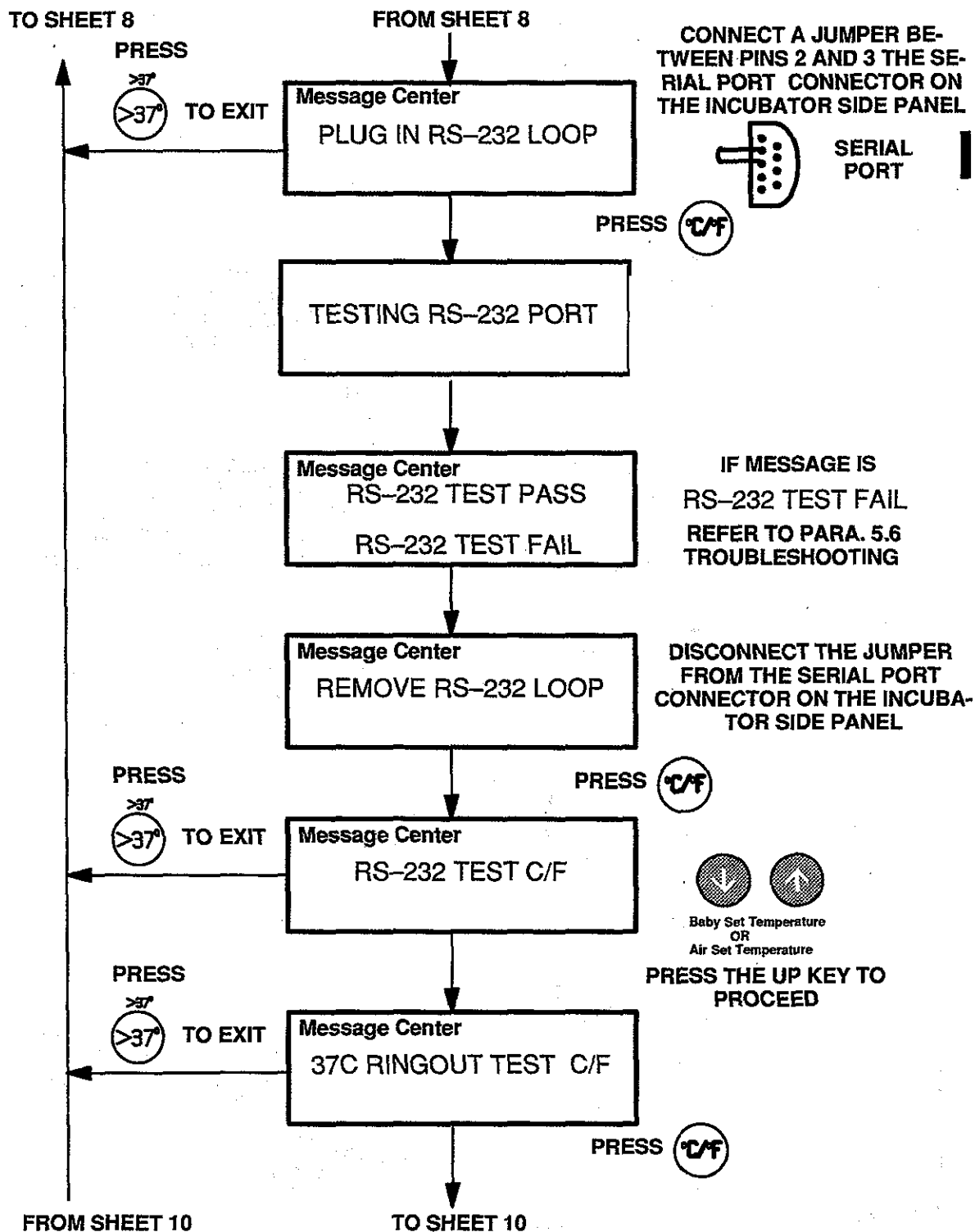
## THE TEST SYSTEM MENU (Sheet 8 of 13)

TO SHEET 7

FROM SHEET 7

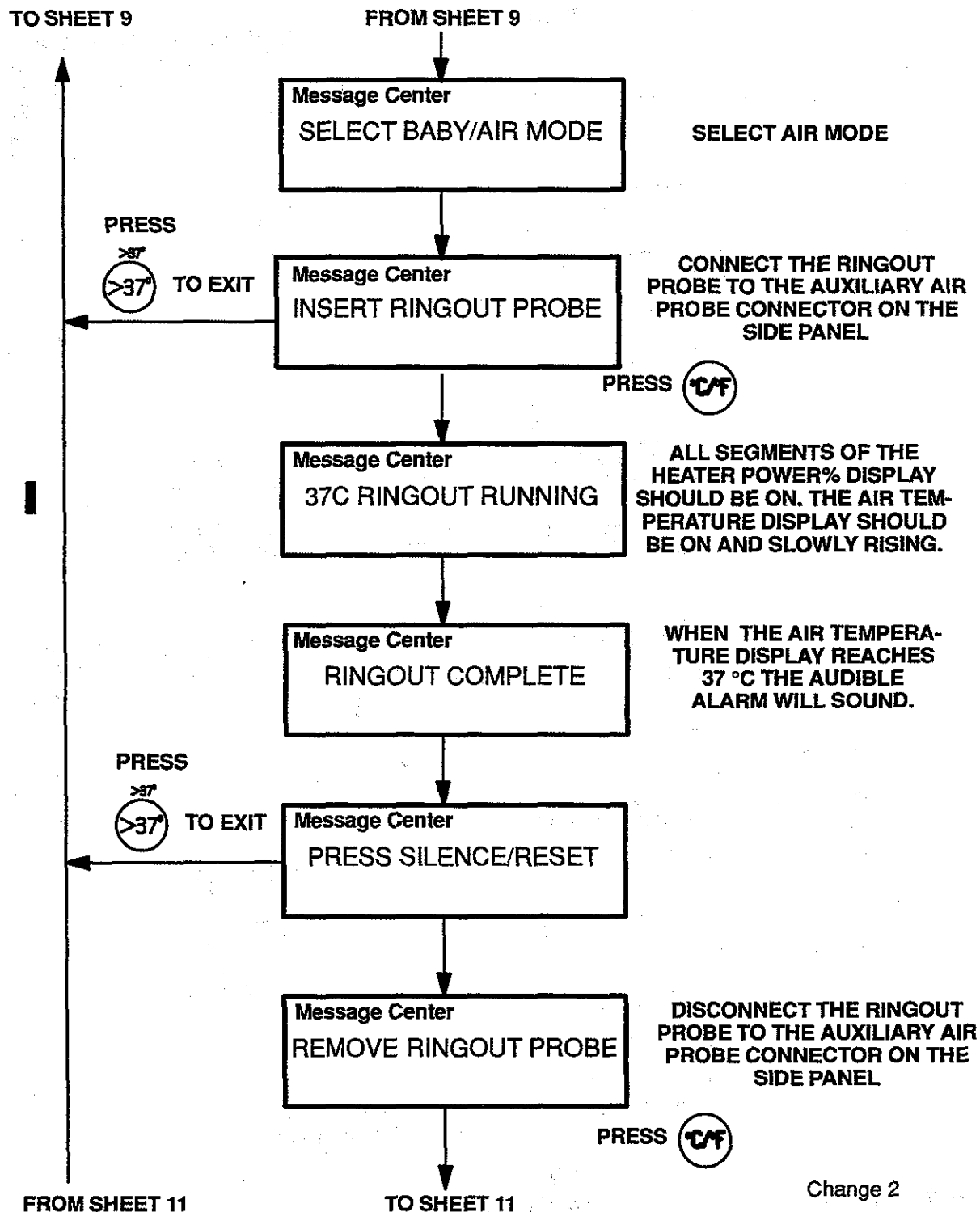


# THE TEST SYSTEM MENU (Sheet 9 of 13)



Change 1

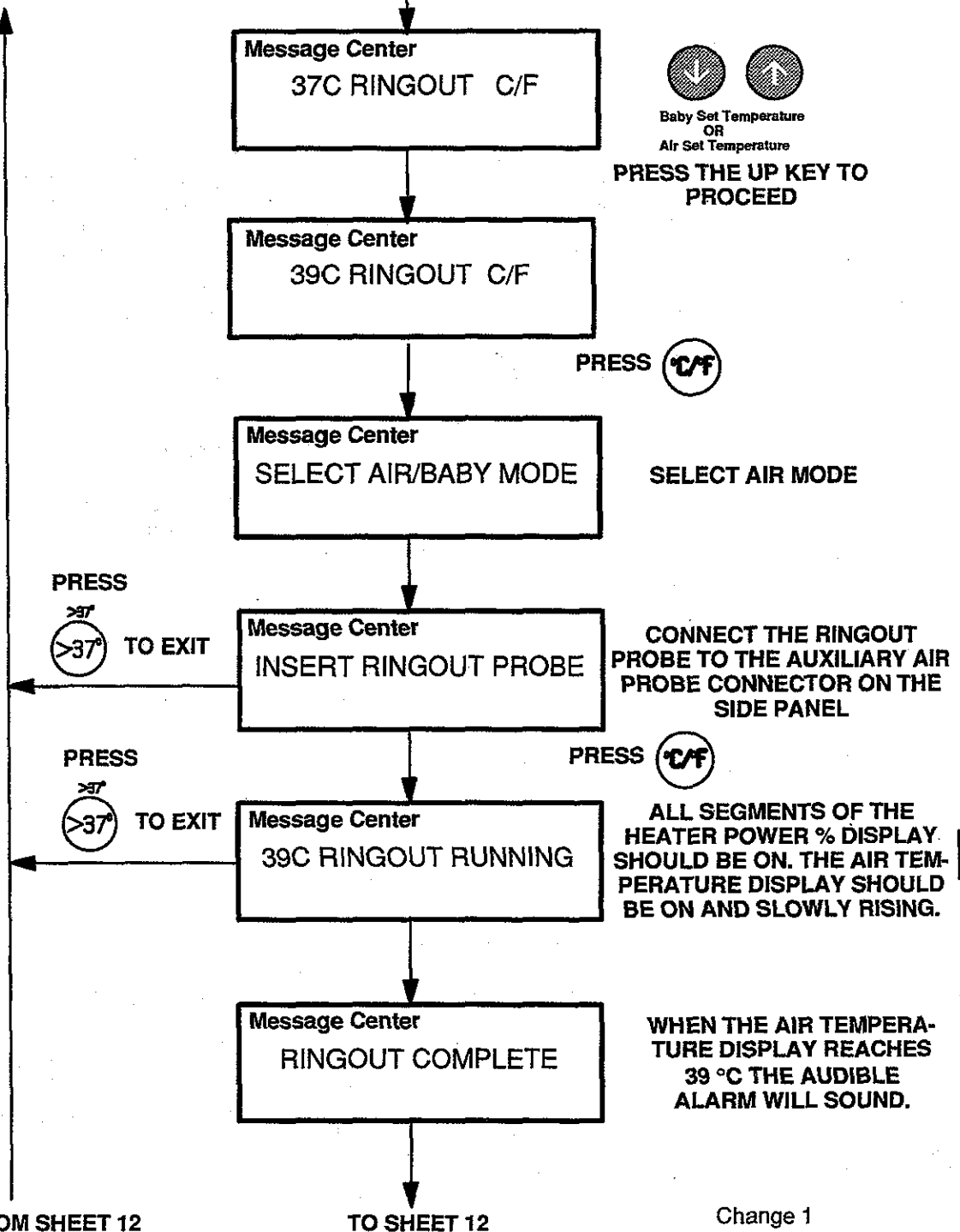
# THE TEST SYSTEM MENU (Sheet 10 of 13)



# THE TEST SYSTEM MENU (Sheet 11 of 13)

TO SHEET 10

FROM SHEET 10

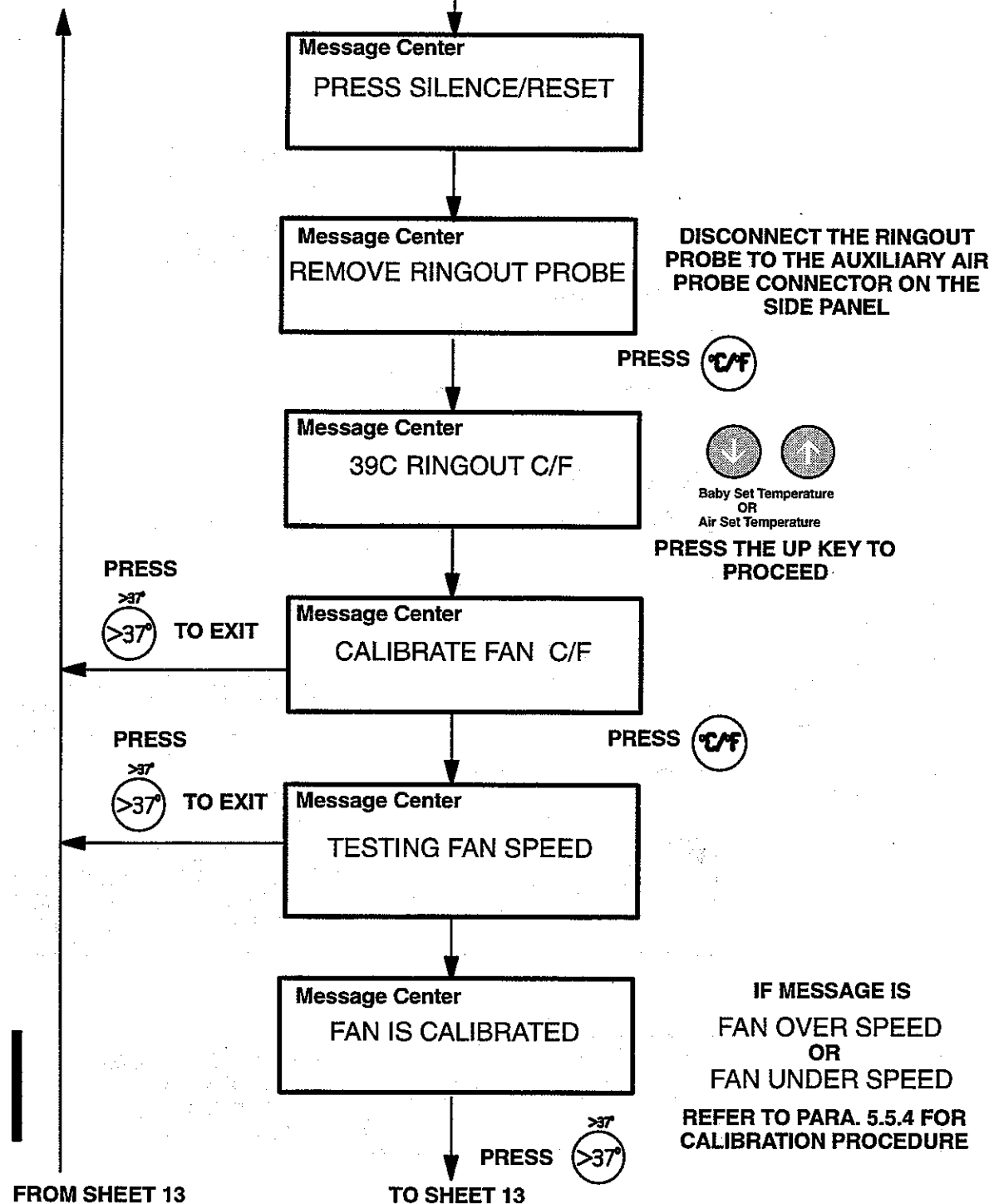


Change 1

## THE TEST SYSTEM MENU (Sheet 12 of 13)

TO SHEET 11

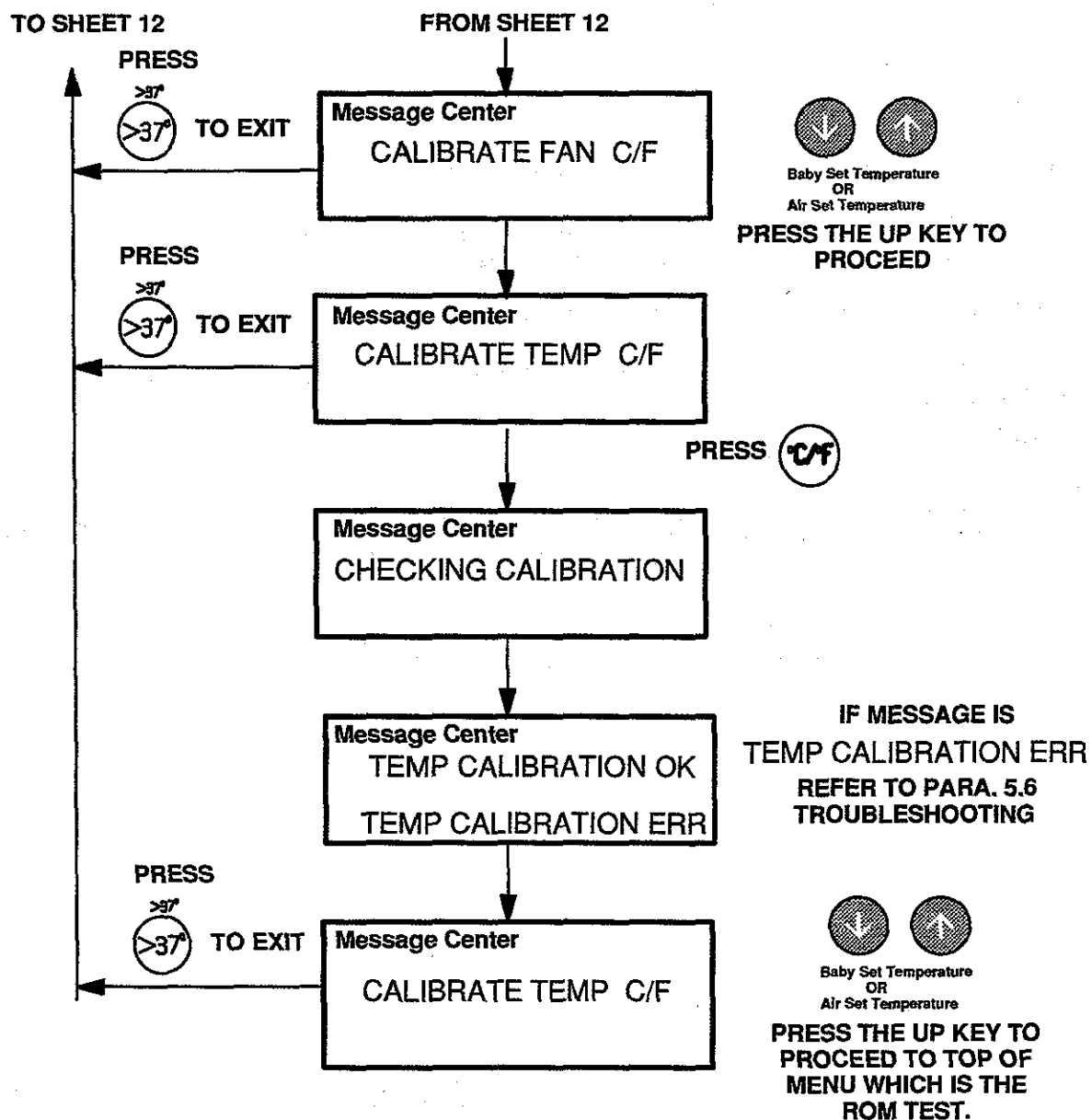
FROM SHEET 11



Change 4



# THE TEST SYSTEM MENU (Sheet 13 of 13)



#### 5.5.4 FAN SPEED AND AC LINE MONITORING CALIBRATION

##### FAN SPEED CALIBRATION (REFER TO FIGURE 5. 2 FOR ADJUSTMENT LOCATION)

Fan Speed Calibration is accomplished by first entering the System Test Menu and then paging down to the CALIBRATE FAN C/F Section of the Menu.

**Note:** The Fan Speed adjustment should be attempted only when the System Test Menu presents one of the following Messages:

FAN UNDER SPEED

FAN OVER SPEED

1. Enter the Test System Menu and page down to the CALIBRATE FAN C/F Section.
2. Press the C/F key, adjust R26 on the Heater Board until the message FAN CALIBRATED replaces the FAN UNDER SPEED or FAN OVER SPEED message.
3. Enter the System Information Menu (Paragraph 5.4) and clear the Diagnostic Log.

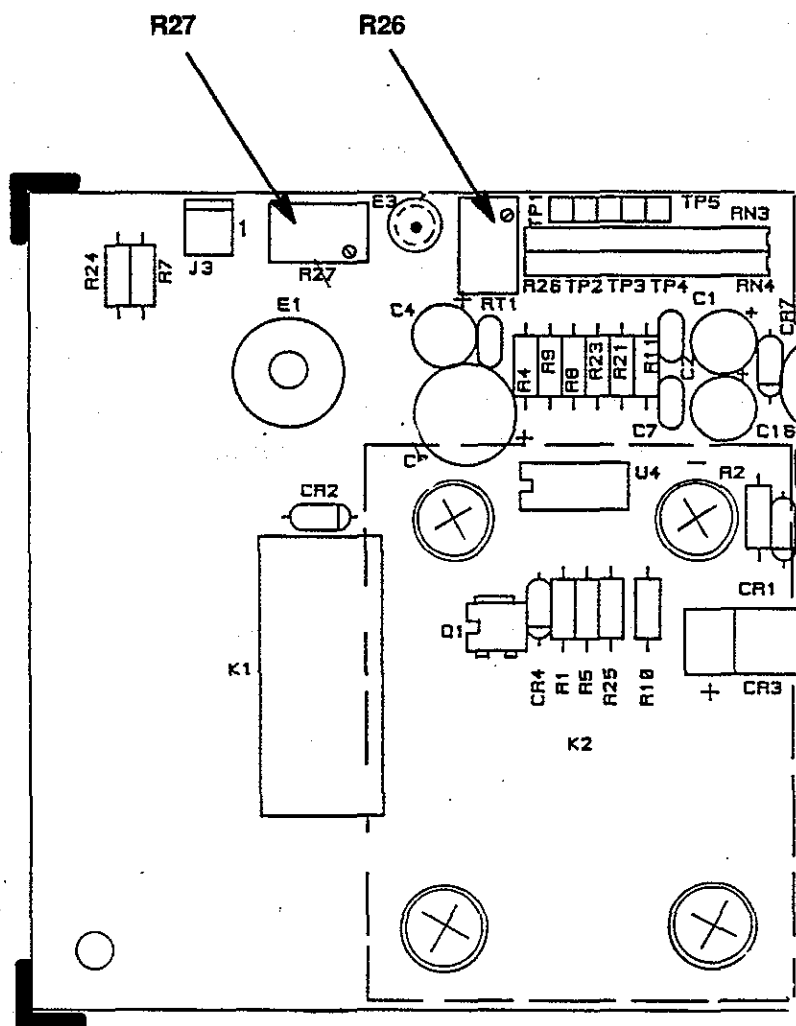
##### AC LINE MONITORING CALIBRATION (REFER TO FIGURE 5. 2 FOR TEST POINT AND ADJUSTMENT LOCATIONS)

##### TEST SET-UP

1. Connect the Controller to the variable transformer and set the transformer to 120 Vac ( 220 Vac or 100 Vac as appropriate). Connect the VOM to TP2 (+) and TP1 (-) on the Heater Board.

##### PROCEDURE

1. Adjust R27 on the Heater Board for a reading of  $6.00 \pm 0.01$  Vdc on the VOM.



**FIGURE 5.2 LOCATION OF HEATER BOARD FAN SPEED AND TEMPERATURE  
CALIBRATION POTENTIOMETERS**

### 5.5.5 LEAKAGE CURRENT TESTS

#### TEST SET-UP

1. Connect the Controller to the primary power source through an ungrounded adapter plug, so that the unit is ungrounded. Turn the POWER switch on.
2. The leakage current test standards provided in the procedure below assume leakage through a resistance of 1000 Ohms. If the Leakage Tester being used does not provide this resistance, the test set-up must be adjusted to provide it.

#### PROCEDURE

1. Use the Leakage Current Tester to measure between the chassis of the unit under test and a known ground such as the ground connection of a wall receptacle. The leakage current must not exceed 100 micro-amps in 120 Vac Units or 500 micro-amps in 220/240 Vac Units.
2. Reverse the plug and repeat step 1.
3. Perform Steps 1 and 2 with the Controller POWER switch OFF.

### 5.5.6 OXYGEN CONCENTRATION TESTS

**Note:** This test is applicable only to units that do not have an Oxygen or Saturation Controller attached to the Filter Cover.

#### TEST-SETUP

1. Place a calibrated oxygen analyzer on the mattress in the Incubator.
2. Apply oxygen at a flow rate of 8 LPM to the O<sub>2</sub> nipple on the Filter Cover.

#### PROCEDURE

1. Turn the unit ON.
2. After 40 minutes of operation, verify that the oxygen concentration level is between 37% and 48%.
3. Increase the Oxygen flow to 12 LPM. After another 40 minutes of operation, verify that the oxygen concentration level is between 65% and 95%.

## 5.6 TROUBLESHOOTING

When the Controller experiences an internal malfunction, the message **NEEDS SERVICE NOW** will be displayed in the Message Center and the Audible Alarm will sound continuously. If the malfunction is still present after the Incubator has been turned off and then turned on again, the **NEEDS SERVICE NOW** message will appear after the Incubator has completed its Self-Test routine.

To determine what has caused or where the failure is located, the operator must access the Diagnostic Log located in the System Information Menu. The Diagnostic Log records all internal malfunctions that generated a **NEEDS SERVICE NOW** Message in the Controller Message Center. To access the Diagnostic Log, refer to Paragraph 5.4.5. If a printer is available, a print-out of the contents of the Diagnostic Log may be obtained by entering the **PRINT DIAG LOG** Menu (refer to paragraph 5.4.6).

**IMPORTANT:** The notation of a malfunction will remain in the Diagnostic Log until the log is cleared (Refer to Paragraph 5.4.7), even though the malfunction has been corrected.

Table 5.1 presents a listing of all Malfunction Messages that will appear in the Diagnostic Log, along with an explanation of each Message and possible corrective actions for the malfunction.

**TABLE 5.1 DIAGNOSTIC LOG MESSAGES AND CORRECTIVE ACTIONS**

MESSAGE	EXPLANATION	POSSIBLE CORRECTIVE ACTION
HIGH TEMP PROBE FAIL	High Temperature Probe Failure	1. Replace High Temperature Probe. 2. Replace Main Board.
AIR FLOW PROBE FAIL	Air Flow Probe Failure	1. Replace Air Flow Probe. 2. Replace Main Board.
FAN OVER SPEED	Fan Motor running to fast	1. Refer to para. 5.5.4 and perform Fan Motor Adjustment Procedure. 2. Replace Heater Board. 3. Replace Fan Motor. 4. Replace heater Bd to Main Bd Cable.
FAN UNDER SPEED	Fan Motor running to slow.	1. Refer to para. 5.5.4 and perform Fan Motor Adjustment Procedure. 2. Replace Heater Board. 3. Replace Fan Motor. 4. Replace heater Bd to Main Bd Cable.
KEYPAD TEST FAIL	One of the Front Panel Keys has failed to operate.	1. Replace Front Panel Overlay. 2. Replace Display Board. 3. Replace Main Board.
EEPROM TEST FAIL	E2 PROM has failed	1. Replace Processor U1 on Main Board.

Change 1

**TABLE 5.1 DIAGNOSTIC LOG MESSAGES AND CORRECTIVE ACTIONS (Cont.)**

MESSAGE	EXPLANATION	POSSIBLE CORRECTIVE ACTION
RAM TEST FAIL	Internal volatile Memory failure	1. Replace Processor U1 on Main Board.
ROM TEST FAIL	Program Memory failure	1. Replace EPROM U2 on Main Board.
ADC 0 VREF ERROR	The microprocessor has detected an error in the Monitor Hybrid R/D Converters reference voltage.	1. Replace Monitor Hybrid. 2. Replace Main Board.
ADC 5 VREF ERROR	The microprocessor has detected an error in the Monitor Hybrid R/D Converters reference voltage.	1. Replace Monitor Hybrid. 2. Replace Main Board.
DAC MIN CNT ERROR	The microprocessor has detected an error in the Control Hybrid D/A Converter	1. Replace Control Hybrid. 2. Replace Main Board.
DAC SET ERROR	The microprocessor has detected an error in the Control Hybrid D/A Converter	1. Replace Control Hybrid. 2. Replace Main Board.
PWR SUPPLY 1 FAIL	The microprocessor has detected an error in the +24 V or -12V Supplies	1. Replace Power Supply. 2. Replace Processor U1 on Main Board. 3. Replace Main Board. 4. Replace Pwr Supply to Main Bd Cable.
PWR SUPPLY 2 FAIL	The microprocessor has detected an error in the +12 V or -5V Supplies	1. Replace Power Supply. 2. Processor U1 on Main Board. 3. Replace Main Board. 4. Replace Pwr Supply to Main Bd Cable.
BATTERY FAILURE	The microprocessor has detected an error in PFA Battery on the Display Board	1. Replace Battery on Display Board. 2. Replace Display Board. 3. Replace Processor U1 on Main Board. 4. Replace Main Board. 5. Replace Display Bd to Main Bd Cable.
TEMP CALIBRATION ERROR	The microprocessor has detected an error in the temperature conditioning signal path	1. Replace Monitor Hybrid. 2. Replace Control Hybrid. 3. Replace Main Board.
HEATER BOARD FAIL	The microprocessor has detected an error in the Heater Board	1. Replace F1 on the Heater Board. 2. Replace Heater Board. 3. Replace AC Entry Bd to Heater Bd Cable.

**TABLE 5.1 DIAGNOSTIC LOG MESSAGES AND CORRECTIVE ACTIONS (Cont.)**

MESSAGE	EXPLANATION	POSSIBLE CORRECTIVE ACTION
INT TEMP TOO HIGH	The microprocessor has detected that the Controller internal temperature is too high.	<ol style="list-style-type: none"><li>1. Replace Cooling Fan.</li><li>2. Replace Heater Board.</li><li>3. Replace Heater Bd to Main Bd Cable.</li></ol>
RS-232 FAILURE	Either the data receive or transmit line from the isolated serial port is non-functional.	<ol style="list-style-type: none"><li>1. Replace Main Board.</li></ol>
VFD TEST FAIL	This message was entered when the user observed a failure in one or more of the Message Center Characters.	<ol style="list-style-type: none"><li>1. Replace VFD Module.</li></ol>
LED TEST FAIL	This message was entered when the user observed a failure of a LED or a segment of a LED.	<ol style="list-style-type: none"><li>1. The following LEDs are mounted on sockets and may be replaced. DS9 thru DS16, 18,19 DS 21,22, 23, 24, 25, 26 27, 28, and 29.</li><li>2. Replace the Display Board</li></ol>
AUDIO TEST FAIL	This message was entered when the user failed to hear the three Beeps generated by the Audio Test.	<ol style="list-style-type: none"><li>1. Replace Speaker on Display Board.</li><li>2. Replace Display Board.</li><li>3. Replace Display Bd to Main Bd Cable.</li><li>4. Replace Main Board.</li></ol>

## **5.7 REMOVAL AND REPLACEMENT PROCEDURES**

### **5.7.1 GENERAL**

This section provides removal and replacement procedures for components of the Incubator. Removal and replacement procedures for components other than those provided are obvious upon inspection.

### **5.7.2 CONTROLLER FRONT PANEL AND CONTROLLER PRINTED CIRCUIT BOARDS**

**Note:** Refer to Figure 6.4, Sheet 2, for the Locations of the Printed Circuit Boards.

#### **CONTROLLER FRONT PANEL**

1. Refer to Section 4.2.1, Step A, and remove the Controller from the unit.
2. Remove the four Phillips Head screws located behind the handles.
3. Disconnect the Ribbon Cable from J8 on the Main Printed Circuit Board.
4. Refer to Figure 6.4, Sheet 2, and disconnect the Front Panel Overlay Ground Strap from the Chassis by removing the Nut (Item 57) and Washer (Item 58).

#### **DISPLAY BOARD**

1. Remove the Controller Front panel as described above.
2. Disconnect P2 and P3 from their connectors.
3. Remove the seven screws that hold the Display Board to the Front Panel.
4. To replace the board, reverse Steps 1 through 3.

#### **MAIN PRINTED CIRCUIT BOARD**

1. Remove the Controller Front panel as described above.
2. Disconnect P2, P3 and P6 from their connectors.
3. Use long-nose pliers to remove the board from the 2 snap-in board supports on the left side. Remove the top screw holding Connector J3 and the screw located at the upper right corner.
4. To replace the board, reverse Steps 1 through 3.

#### **IMPELLER FAN MOTOR AND AIR FLOW PROBE**

1. Remove the Front Panel and Main Board as described above.
2. To remove the Fan Motor, refer to Figure 6.4, Sheet 1, and reference Items 3, 4, 6, 7, 8 and 9.
3. To remove the Air Flow Probe, refer to Figure 6.4, Sheet 1, and reference Items 27, 28, 29 and 30.
4. For reassembly, reverse Steps 1 and 2 or Steps 1 and 3.

#### **AC ENTRY BOARD AND CHASSIS RIGHT SIDE PANEL**

1. Remove the Front Panel and Main Board as described above.



2. Disconnect the connectors from J2 and J3.
3. Remove the four screws located on the right side of the Chassis.
4. To replace the Board and Chassis, reverse Steps 1 through 3.

#### **AIR TEMPERATURE PROBE**

1. Remove the Front Panel, Main Board and ac Entry and Chassis as described above.
2. To remove the Air Temperature Probe refer to Figure 6.4, Sheet 1, and reference Items 20 through 26.
3. To replace the probe, reverse Steps 1 and 2.

#### **HEATER BOARD**

1. Remove the Front Panel.
2. Remove the nuts and washers from E1 and E2. Remove the screws located at the lower left and upper right corners of the board.
3. To replace the board, reverse Steps 1 and 2.

#### **HEATER**

1. Remove the Front Panel and the Heater Board as described above.
2. Refer to Figure 6.4, Sheet 1, and reference Items 10, 15 and 16.
3. To replace the heater, reverse Steps 1 and 2.

#### **POWER SUPPLY**

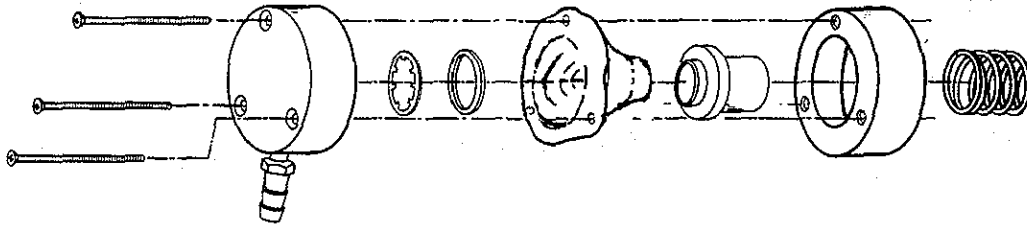
1. Remove the Front Panel as described above.
2. Remove the 2 screws located directly under the Heater on the Chassis rear panel. Remove the 2 screws located at the front corners of the Power Supply Board.
3. To replace the Power Supply, reverse Steps 1 and 2.

#### **5.7.3 PNEUMATIC FRONT PANEL**

1. Refer to Section 4.2.1, Step A, and remove the Controller from the unit.
2. Slide the Pneumatic Panel to the right as far as it will go. Lift the Panel out of its Keyhole slots.
3. Remove the White, Red and Blue tubes from the Y Connectors by pressing on the Red Collar of the Connector and pulling out the tube.
4. To replace the Pneumatic Panel, refer to Figure 7.1, Pneumatic Tubing Diagram, and reconnect the White, Blue and Red tubes to the Y Connectors.
5. Replace the panel in its keyhole slots and slide it to the left as far as it will go.

#### 5.7.4 OXYGEN INPUT VALVE FILTER CARTRIDGE

1. Refer to Figure 5.3 and remove the three screws which hold the Input Valve to the Air Intake Filter Cover.
2. Replace the Filter Cartridge (Part No. 68 130 67) and reassemble the Oxygen Input Valve as shown in Figure 5.3.



**FIGURE 5.3 OXYGEN INPUT VALVE ASSEMBLY**

#### 5.7.5 VHA STAND

##### VHA STAND ACTUATOR

Refer to Figure 6.14 for all references in parentheses ( ).

1. Remove the Incubator from the VHA Stand.
2. Remove the cable clamps (35) from the Platform (13).
3. Remove the 8 nuts (50) from the top of the Platform (13). Remove the Platform from the Stand.
4. Pull the Escutcheon (16) straight up and off the stand.

**CAUTION:** Do not pull Inner Column Assembly (14) up to extend the Gibs (Item 2, Figure 6.15) beyond the top surface of the outer column. If this has been inadvertently done, the Inner Column Assembly must be completely removed and then reassembled using the Procedures described in Para. 5.7.6.

5. Remove the Ground Lug and Cable Clamp (36) at the top of the post by removing the nuts (49).
6. Remove the Mains Panel (8). Disconnect the White Wire from the MAIN POWER Switch (refer to Figure 5.4 for 120V Units or Figure 5.5 for 220V/240V Units).
7. Disconnect the Blue Wire and Brown Wires of the Incubator Power Cord from the MAIN POWER Switch (refer to Figure 5.4 for 120V Units or Figure 5.5 for 220/240V Units).

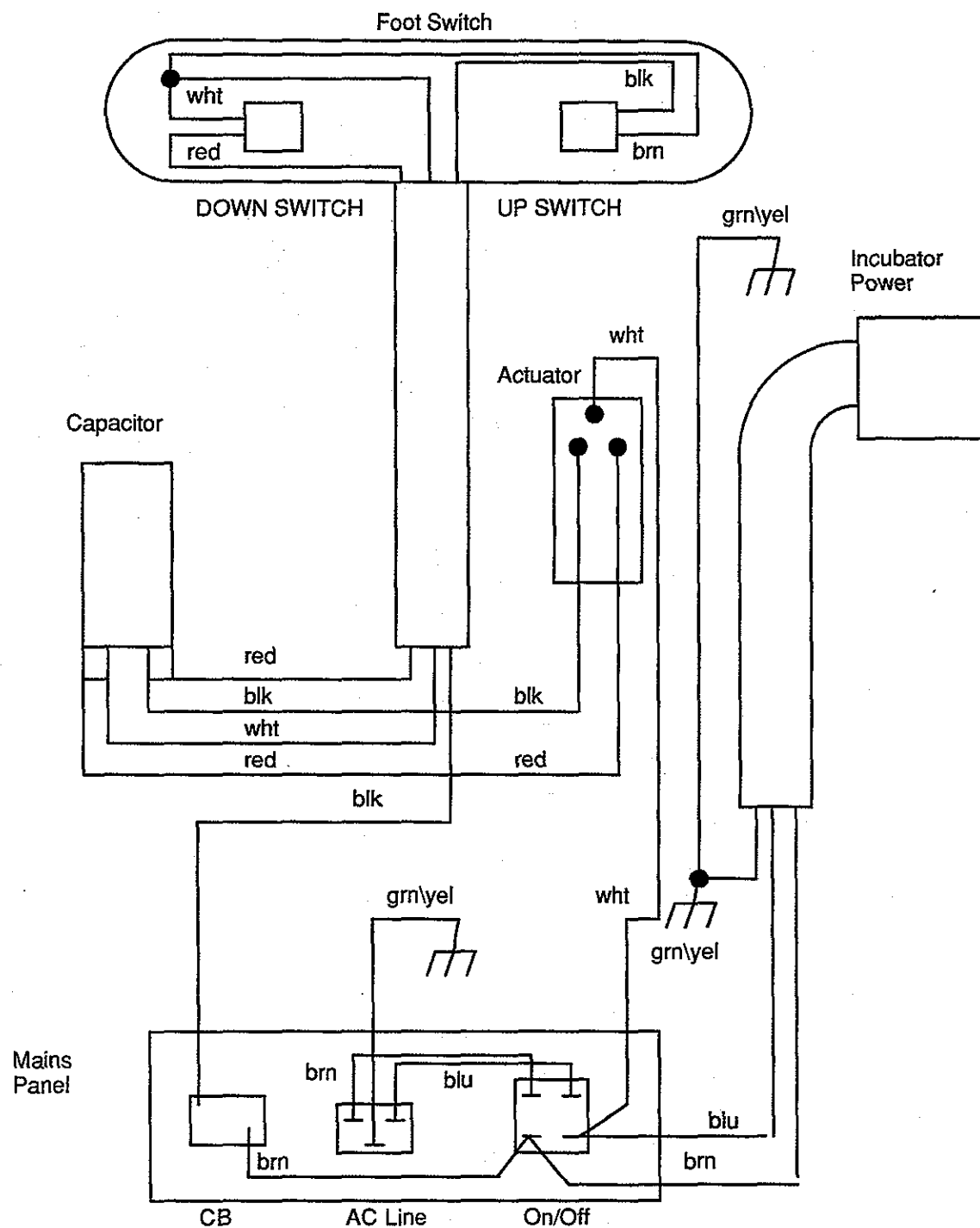
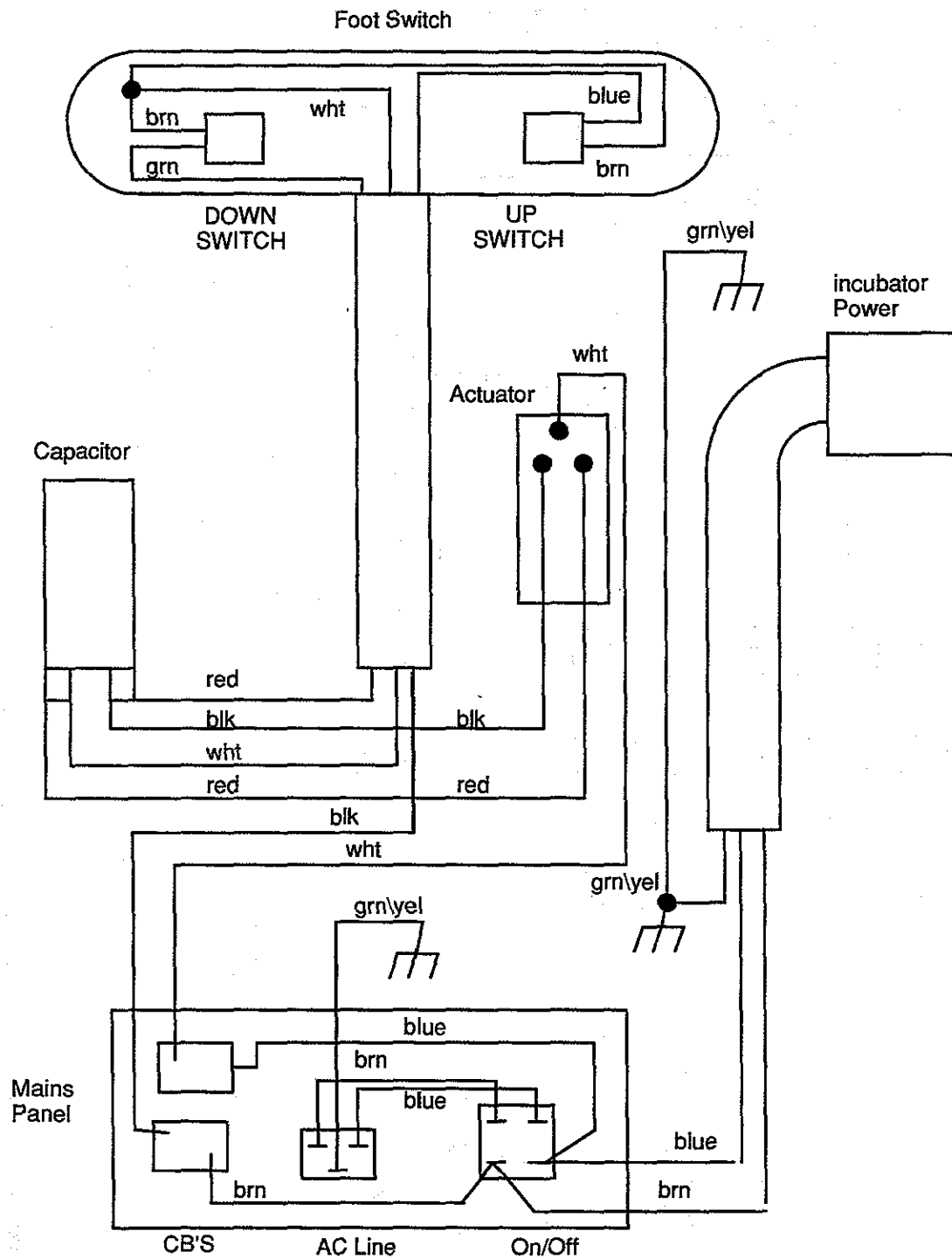


FIGURE 5.4 VHA STAND WIRING DIAGRAM-120V UNITS

Change 1



**FIGURE 5.5 VHA STAND WIRING DIAGRAM-220/240V UNITS**

Change 1

8. Remove the two nuts (49) holding the Incubator Power Cord Ground Lug and the Ground Lug from the Actuator wiring harness (Green/Yellow Wires) from the Stand. Remove the Cable Clamp (36) that attaches the Actuator wiring harness to the Stand.
9. Remove the two nuts (50) that hold the Actuator from beneath the Stand. Pull the Actuator straight out of the Stand.
10. To install the Actuator, first perform Steps 5 through 9 in reverse order.
11. Connect the unit to the ac line and then, while holding the actuator, extend the actuator to maximum. Temporarily install the Escutcheon on the actuator studs using two nuts (50). Carefully lower and guide the Escutcheon onto the six studs on the stand. Remove the nuts holding the actuator.
12. Install the platform (13) and secure it with 8 nuts (50).
13. Install the cable clamps (35) on the platform and replace the Incubator on the VHA Stand.

#### UP/DOWN SWITCH

Refer to Figure 6.14 for references in parentheses ( ).

1. Perform Steps 1 through 4 of the VHA Stand Procedure.
2. Remove the Red and White wires from the Capacitor. Remove the Black wire coming from the Up/Down Switch wiring harness from Circuit Breaker on the Mains Panel (Refer to Figure 5.4 for 120V Units or Figure 5.5 for 220V/240V Units).
3. Remove the four nuts (49) that hold the Switch Assembly to the Stand. Remove the Switch Assembly and wiring harness from the Stand.
4. Install the new Switch Assembly by performing Steps 2 and 3 in reverse order. Then perform Steps 11, 12 and 13 of the VHA Stand Actuator Procedure.

#### PHASE SHIFT CAPACITOR

Refer to Figure 6.14 for references in parentheses ( ).

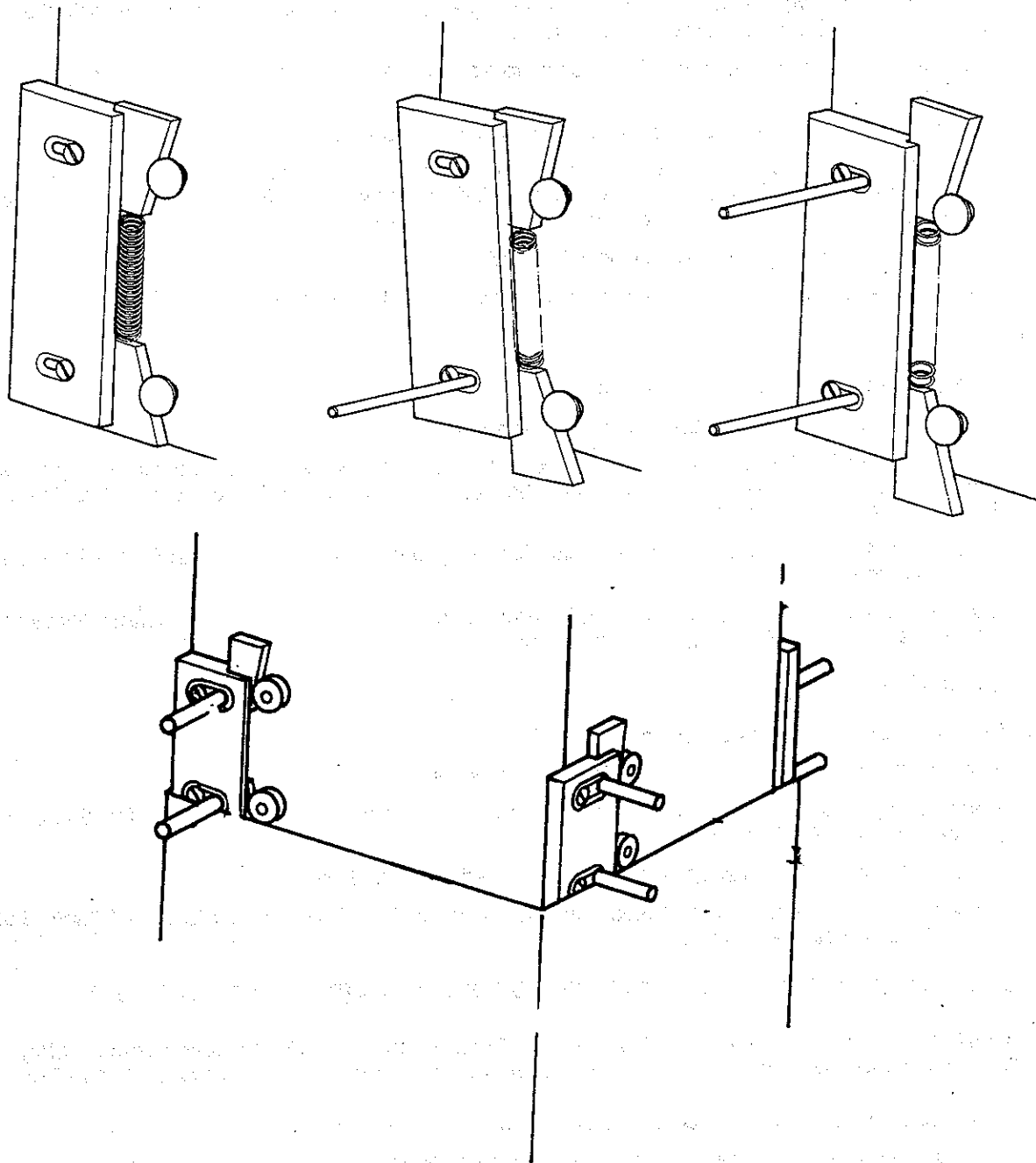
1. Perform Steps 1 through 4 of the VHA Removal Procedure.
2. Remove the two Red, one Blue and one Black wires from the capacitor (refer to Figure 5.4 for 120V Units or Figure 5.5 for 220V/240V Units).
3. Remove the nuts (49) and strap (7) holding the Capacitor (4) in place.
4. Install the capacitor by performing Steps 2 and 3 in reverse order. Then perform Steps 11, 12 and 13 of the VHA Stand Actuator Procedure.

#### 5.7.6 REASSEMBLY OF INNER COLUMN INTO OUTER COLUMN (REFER TO FIGURE 5.6)

**CAUTION:** Do not attempt to reassemble the Inner Column into the Outer Column without using the Gib Pins (Air-Shields Part No. 68 900 02). Improper assembly may cause damage to the Gibs.

1. If necessary, remove the inner column assembly from the outer column.
2. Use a screwdriver to push each Gib back and insert the Gib Pins into the slots (refer to Figure 3.9) to retain the Gibs.
3. Insert the Inner Column into the Outer Column until the four lower Gib Pins rest on the top surface of the Outer Column.
4. Remove the four lower Gib Pins. Push the Inner Column down into the Outer Column until the upper Gib Pins contact the top surface of the Outer Column. Remove the Gib Pins.
5. Continue to push the Inner Column down until the Gibs are below the two surfaces of the Outer Column.

Change 1



**FIGURE 5.6 INSERTION OF GIB PINS**

## SECTION 6 PARTS LIST

### 6.1 GENERAL

This section provides parts lists for the Isolette® Infant Incubators, Models C500 QT® and C550 QT®. Part numbers of operator replaceable parts, accessories and single use items are provided below:

OPERATOR REPLACEABLE PARTS	PART NO.
AC LINE CORD 120V .....	17 AZ 100
AC LINE CORD 220V .....	17 AZ 200
AUXILIARY AIR TEMPERATURE PROBE .....	68 209 81
BABY TEMPERATURE PROBE (Model C550 QT® only) .....	68 209 70
INNER WALLS W/MTG KNOBS (Model C550 QT® only) (optional in C500 QT®) .....	68 500 40
MICROFILTER (Box of 4) .....	26 945 70
MATTRESS TILT BELLOWS .....	68 504 29
BELLOWS, BOTTOM PLATE .....	68 504 28
BELLOWS, TOP PLATE .....	68 504 32
WEIGHING HOOK (5" for Weighing Scale) .....	12 621 70
WEIGHING SLING .....	26 830 20
<b>ACCESSORIES</b>	
CABINET STAND .....	68 416 30
RAIL SYSTEM FOR STANDARD CABINET STAND .....	68 407 70
SOLAIR™ TRANSPARENT HOOD WARMER .....	68 508 70
MICRO-LITE™ PHOTOTHERAPY SYSTEM .....	68 420 70
GUARD RAIL, MODEL C500/550 QT® .....	68 416 50
<b>DEW-ETTE® INCUBATOR HUMIDIFIER</b>	
English w/Remote (120V) .....	68 127 70
English w/o Remote (120V) .....	68 127 80
English w/Remote (220/240V) .....	68 127 73
English w/o Remote (220/240V) .....	68 127 83
German w/Remote (220/240V) .....	68 127 76
German w/o Remote (220/240V) .....	68 127 86
Spanish w/Remote (120V) .....	68 127 71
Spanish w/o Remote (120V) .....	68 127 81
Spanish w/Remote (220/240V) .....	68 127 74
Spanish w/o Remote (220/240V) .....	68 127 84
Italian w/Remote (220/240V) .....	68 127 77
Italian w/o Remote (220/240V) .....	68 127 87
French w/Remote (120V) .....	68 127 72
French w/o Remote (120V) .....	68 127 82
French w/Remote (220/240V) .....	68 127 75
French w/o Remote (220/240V) .....	68 127 85
Japanese w/Remote (100V) .....	68 127 78
Japanese w/o Remote (110V) .....	68 127 88

Change 2

C500/C550  
PARTS LIST

DEW-ETTE® MOUNTING PLATE W/OXYGEN INLET

English .....	68 125 60
Spanish .....	68 125 61
French .....	68 125 62
German .....	68 125 63
Italian .....	68 125 64
Japanese .....	68 125 65

STERILIZER TANK ..... 26 517 01

WEIGHING SCALE ..... 26 830 70

■ OXYGEN CYLINDER SUPPORT ..... 26 840 70

POST (2) /SWIVEL SHELVES (2) (Standard Cabinet Stand) ..... 68 401 70

I.V. POLE STANDARD CABINET STAND ..... 68 415 35

REMOTE ALARM MODULE (Requires I.V. Pole or Rail System for Mounting) ..... 68 413 70

HIGH TEMPERATURE TEST PLUG

English .....	68 231 20
Spanish .....	68 231 21
French .....	68 231 22
German .....	68 231 23

**WARM WEIGH® I20 SCALE AND REPLACEMENT PARTS**

WARM WEIGH® INFANT SCALE, MODEL I20 ..... 03 320 70

MATTRESS, DISPOSABLE (10 per case) ..... 67 903 86

MATTRESS TRAY ..... SH82000000

CALIBRATED WEIGHT SET ..... 03 310 15

5 kg WEIGHT ..... 03 310 16

**OPTIONAL VHA STAND AND ACCESSORIES**

VHA STAND ASSY ..... 68 415 70

CABINET MODULE ..... 68 416 80

DOOR FOR CABINET MODULE ..... 68 416 85

I.V. POLE ..... 68 415 25

RAIL SYSTEM FOR VHA STAND ..... 68 407 80

**RAIL SYSTEM (STANDARD AND VHA STANDS) ACCESSORIES**

MONITOR SHELF PACKAGE ..... 68 408 00

ATHENA® MONITOR SHELF ASSY ..... 68 408 15

ATHENA® MONITOR PAM KIT ..... 68 408 70

UTILITY POLE ASSY ..... 68 408 20

I.V. TREE ASSY ..... 68 408 30

OVERHEAD RAIL ..... 68 408 35

MODURA ASSY ..... 68 408 45

STUB MOUNT ASSY ..... 68 408 40

OXYGEN FLOWMETER KIT ..... 68 408 50

AIR FLOW KIT ..... 68 408 55

SUCTION KIT ..... 68 408 60

BLENDER KIT ..... 68 408 65

MICRO-LITE™ PIVOT ARM ASSY ..... 68 423 80

Change 4



**SINGLE USE ITEMS**

ENTRY PORT SLEEVES (Case of 100) .....	26 920 70
ACCESS DOOR CUFFS DISPOSABLE (Case of 100) .....	68 120 70
MATTRESSES (Case of 10) .....	79 265 10
CRITTER COVERS® PROBE COVERS (Box of 100) .....	68 209 46
CRITTER COVERS® PROBE COVERS (Ctn of 600) .....	68 209 45
STORAGE COVERS (Pack of 50) .....	26 920 72
HUMIDITY INDICATOR CARDS (Pack of 5) .....	68 120 43
KLEENASEPTIC® CLEANSER (6 One-quart bottles per case w/one spray pump) .....	79 251 73
VAPASEPTIC® AIR SANITIZER (Case of 12) .....	79 250 71
PREMI-PROBE® 1, DISPOSABLE TEMP PROBE, (Box of 10) .....	68 209 20
PREMI-PROBE® 1, DISPOSABLE TEMP PROBE, (Ctn of 100) .....	68 209 30

Change 5

C500/550  
PARTS LIST

**6.2 RECOMMENDED SPARE PARTS – QUANTITY OF 1 TO 5 UNITS**

REPLACEMENT PART	QTY	PART NO.
ACCESS DOOR GASKET .....	2	68 120 01
ACCESS GROMMET .....	2	68 120 45
ACCESS CUFF .....	2	68 120 56
IRIS RING ASSEMBLY .....	2	68 120 76
TRIM STRIP .....	2	68 121 25
PLUNGER .....	2	68 121 45
STRICKER PLATE .....	2	68 121 55
IMPELLER .....	1	68 205 41
THERMISTOR ASSEMBLY .....	1	68 214 76
AIR FLOW SENSOR .....	1	68 214 81
MOTOR ASSEMBLY .....	1	68 230 20
ACCESS DOOR HINGE .....	2	68 510 05
ACCESS DOOR SPRING .....	2	68 510 10
ACCESS DOOR PIVOT .....	2	68 510 40
ACCES PANEL GASKET .....	1	68 512 10
PAWL LATCH KIT .....	2	68 902 96
MAIN PCB TESTED .....	1	68 908 40

Change 6

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Change 6

C500/C550  
PARTS LIST

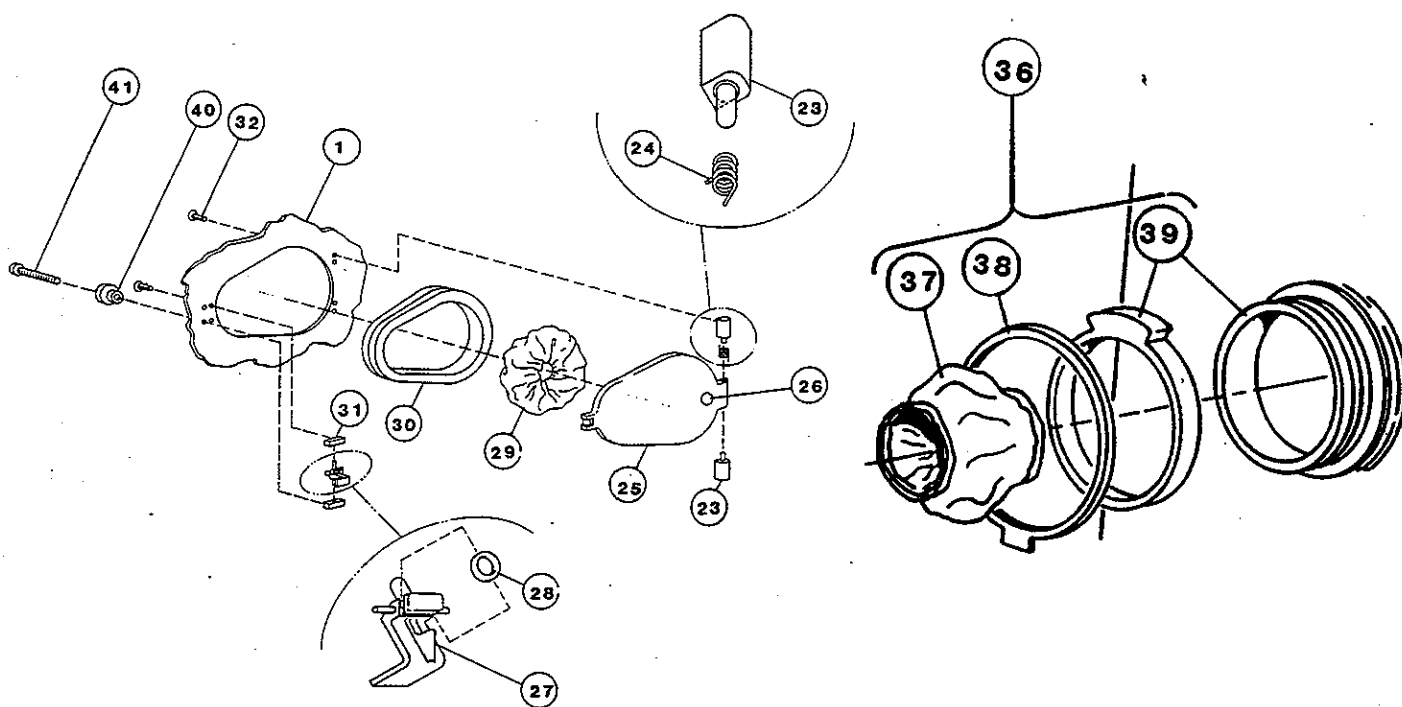
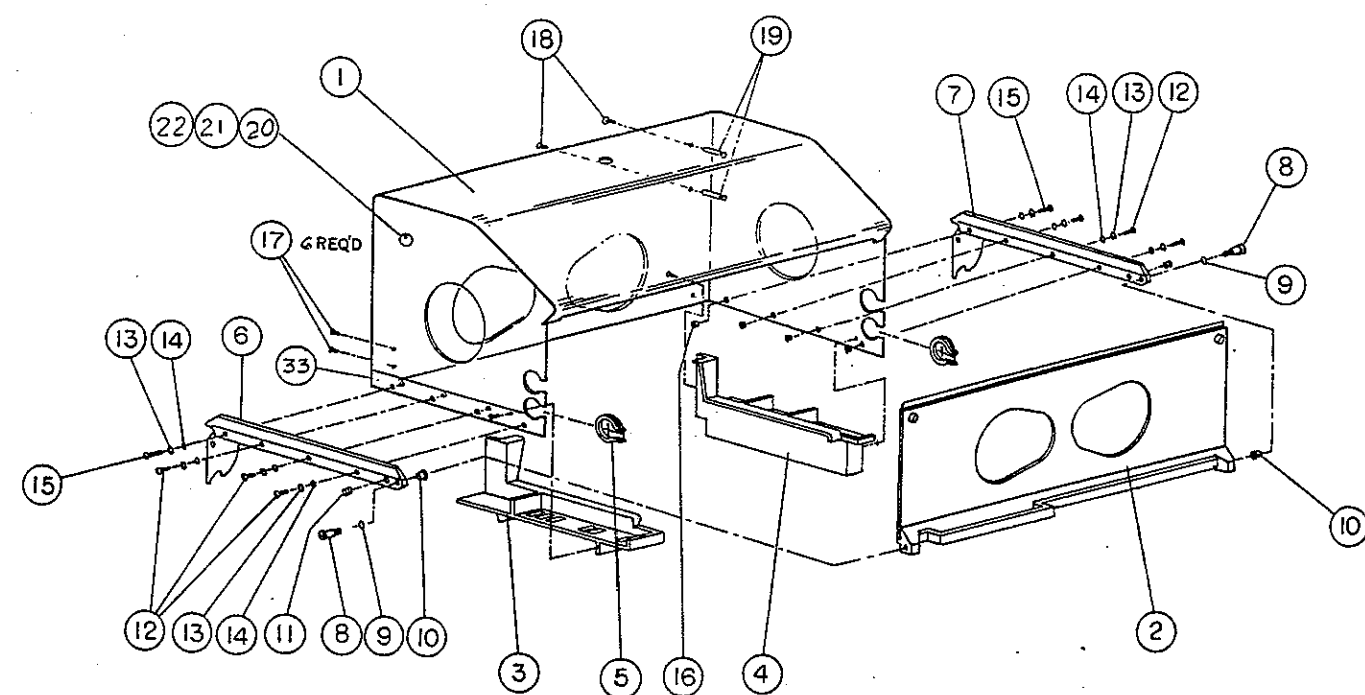


FIGURE 6.1 PARTS LOCATION DIAGRAM, HOOD ASSEMBLY

TABLE 6.1 HOOD ASSEMBLY, PARTS LIST

(Sheet 1 of 1)

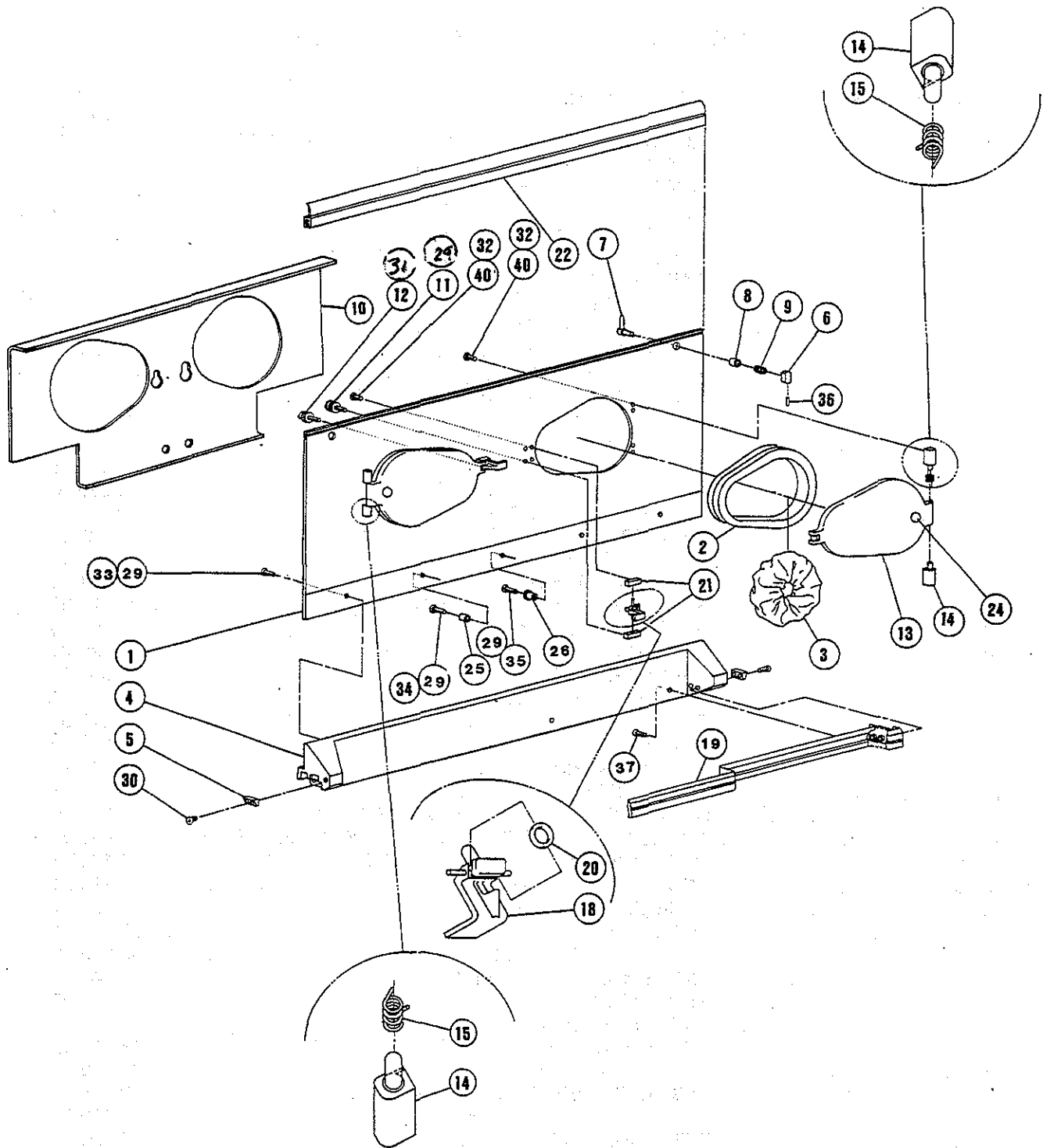
ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		HOOD ASSEMBLY, 2 ACCESS DOORS, 2 IRIS PORTS .....	68 505 72
		HOOD ASSEMBLY, 3 ACCESS DOORS, 1 IRIS PORT .....	68 505 71
1**		HOOD, INCUBATOR (ACRYLIC ONLY)	
		2 ACCESS DOORS, 2 IRIS PORTS (INCLUDES 3 & 4) .....	68 901 48
		3 ACCESS DOORS, 1 IRIS PORT (INCLUDES 3 & 4) .....	68 901 47
2		ACCESS PANEL (REFER TO TABLES 6.2 or 6.3)) .....	68 159 90
3***		BAFFLE LEFT .....	68 156 34
4***		BAFFLE RIGHT .....	68 156 14
5		ACCESS GROMMET .....	68 120 45
6		HOOD MOUNT, LEFT SIDE .....	68 121 15
7		HOOD MOUNT, RIGHT SIDE .....	68 121 05
8*		SCREW, SHOULDER SLOTTED HEAD .....	68 121 30
9*		WASHER, NON-METALLIC, 3/8 ID .....	68 121 40
10*		BEARING FLANGE, 3/8 ID .....	68 121 35
11*		PLUNGER SPRING .....	68 121 45
12		SCREW, 10 - 32 X 5/8, LG, TR, PH SS .....	99 023 58
13		WASHER, NO. 10, LOCK INTER, SS .....	99 123 92
14		WASHER, NO. 10, FLAT SS 0.062 THK .....	99 123 62
15		SCREW, 10 - 32, 7/8 LG, TR, PH, SS .....	99 043 18
16		STUD, THREADED, 10 - 32 .....	26 301 14
17		SCREW, 6 - 32 X 1/2, TR, PH, SS .....	99 023 63
18		SCREW, 6 - 32 X 3/4, TR, PH, SS .....	99 024 69
19		HUMIDITY CARD MOUNTING STUD .....	68 120 41
20		THREADED STUD, 10 - 32 .....	26 301 14
21		COVER PLATE .....	26 651 22
22		SCREW, 10 - 32 X 1/4 .....	99 040 51
23		HINGE PIVOT .....	68 510 05
24		TORSION SPRING .....	68 510 10
25		DOOR ASSEMBLY .....	68 902 85
26		BUMPER CLR POLYURETH, SELF ADHES .....	78 293 10
27		ACCESS DOOR LATCH ASSEMBLY, INCLUDES ITEM 28 ...	68 902 97
28		O-RING, 3/8 DIA X 1/2 OD X 1/16 NPRN .....	99 160 54
29		ACCESS DOOR CUFF .....	68 120 56
30		ACCESS DOOR GASKET .....	68 120 01
31		LATCH PIVOT .....	68 510 40
32		SCREW, 6 - 32 X 3/8 FL PH SS .....	99 023 39
33		WHITE PLASTIC TRIM STRIP .....	68 147 00
34		REINFORCING DISK .....	68 156 03
35		TRIM STRIP, WHITE	
		(NOT SHOWN) COVERS SCREWS OF ITEMS 6 & 7 .....	68 121 25
36		IRIS PORT ASSEMBLY .....	68 120 74
37		IRIS PORT SLEEVE, REUSABLE	12 615 00
		DISPOSABLE .....	26 920 70
38		RETAINING RING .....	68 120 32
39		RING ASSEMBLY .....	68 120 76
40		SMALL RETAINER KNOB .....	68 156 62
41		SCREW, 6 - 32 X 1.12 TR PH SS NYLOCK .....	99 025 44
42		HEAT SHIELD ASSY (NOT SHOWN)(REAR) .....	68 113 16

\*Not supplied with Hood Assembly - Must be ordered separately.

\*\*Also order Quantity 2 of Item 35 - Trim Strip

\*\*\*Baffle Replacement Kit includes both baffles - P/N 68 901 46

Change 4



**FIGURE 6.2 PARTS LOCATION DIAGRAM, ACCESS PANEL ASSEMBLY UNITS  
EQUIPPED WITH PNEUMATIC TILT**

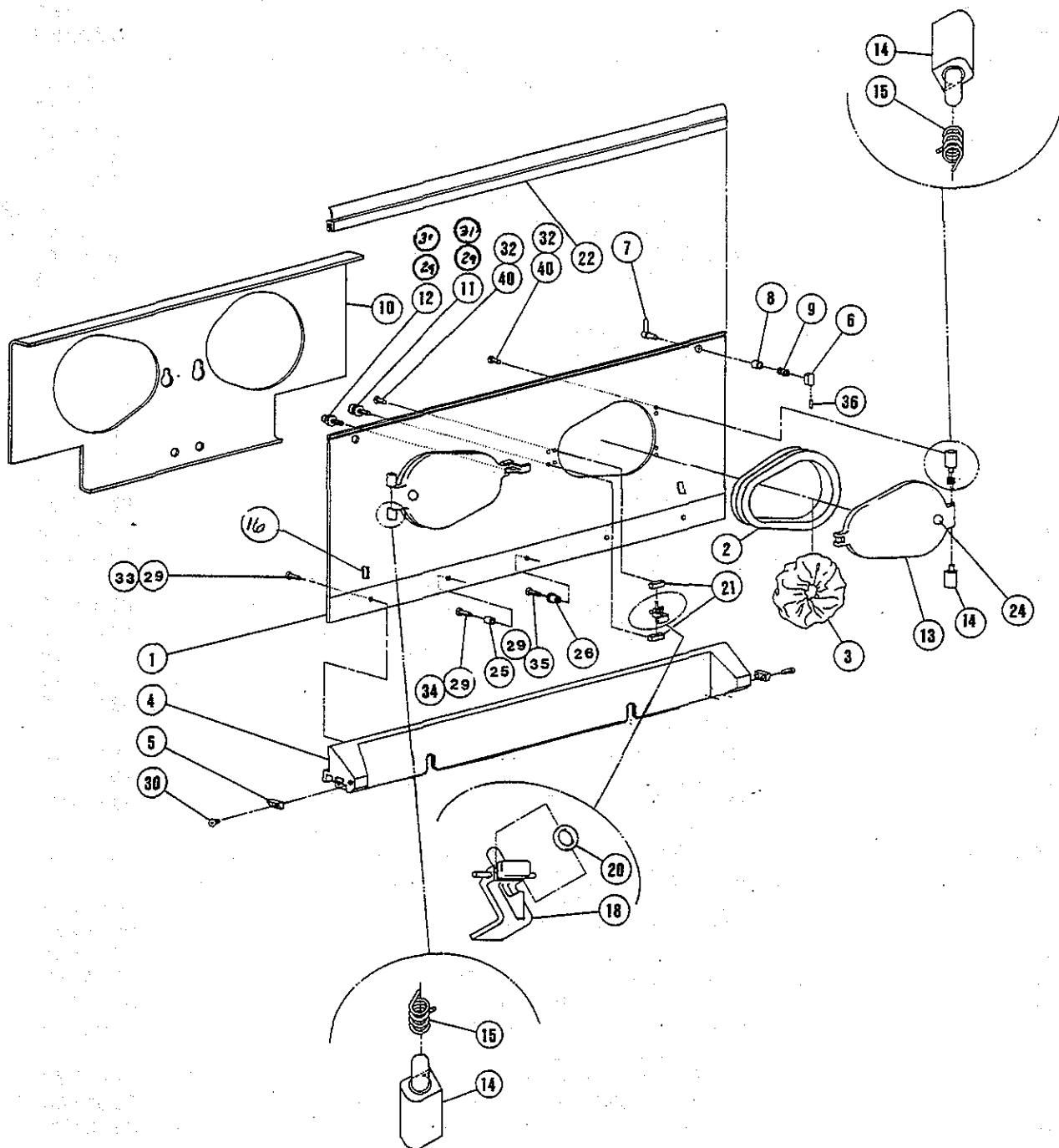
Change 4

**TABLE 6.2 ACCESS PANEL ASSEMBLY, UNITS EQUIPPED WITH PNEUMATIC  
TILT, PARTS LIST**

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		PANEL, ACCESS, REPLACEMENT KIT, (INCLUDES ITEMS 6,7,8,9, 26,35,36,38, 39 AND 41) ENG	68 901 50
		SPN	68 901 51
		FRN	68 901 52
		GER	68 901 53
		ITL	68 901 54
2		GASKET, ACCESS DOOR, REUSABLE	68 120 03
3		CUFF, ACCESS DOOR	68 120 56
4		BEZEL, FRONT, ACCESS, PNL MTG	68 506 40
5		PLATE, STRIKER	68 121 55
6		REFER TO ITEM 16	
7		REFER TO ITEM 16	
8		REFER TO ITEM 16	
9		REFER TO ITEM 16	
10		HEAT SHIELD, FRONT	68 113 15
11		KNOB, RETAINER, LARGE	68 156 61
12		KNOB, RETAINER, SMALL	68 156 60
13		DOOR, ASSEMBLY	68 902 85
14		PIVOT, HINGE	68 510 05
15		SPRING, TORSION	68 510 10
16		PAWL LATCH REPLACEMENT KIT	68 902 96
17		NOT USED	
18		LATCH ASSY, ACCESS DOOR INCLUDES ITEM 20	68 510 26
19		FRONT BEZEL HANDLE	68 506 42
20		O RING, 3/8 ID x 1/2 OD x 1/16, NPRN	99 160 54
21		PIVOT, LATCH	68 510 40
22		STRIP, SEALING	68 512 10
23		NOT USED	
24		BUMPER, CLR POLYURETH, SELF ADH	78 293 10
25		SPACER, 1/2 OD X 0.166 ID X 3/8 LG	68 156 66
26		MATTRESS STOP GUIDE	68 504 43
27		NOT USED	
28		ADHESIVE, CYACRLT, LOC 404/EAST 910	AR
29		ADHESIVE, CLEAR 3M4693	AR
30		SCREW, 6-32 x 1/4 FL PH SS	99 023 94
31		SCREW, 6-32 x 1" TR PH SS, NYLOK	99 025 23
32		SCREW, 6-32 x 3/8 FL PH SS	99 023 64
33		SCREW, 8-32 x 1/2 TR PH SS	99 031 99
34		SCREW, 8-32 x 7/8 FL PH SS	99 033 15
35		SCREW, 8 - 32 X 7/8 TR PH SS	99 033 19
36		REFER TO ITEM 16	
37		SCREW, NO. 6 X 3/8" FL PH SS	99 023 39
38		PINK QT/ ANIMALS LABEL (NOT SHOWN)	68 512 36
39		WARNING; INFANT SAFETY LABEL -ENG (NOT SHOWN)	68 501 20
		SPN	68 501 21
		FRN	68 501 22
		GER	68 501 23
		ITL	68 501 24
40		ADHESIVE, CLR, ELASTOMERC3M4693	99 902 53
41		PATENT PENDING LABEL	68 512 13

Change 7



**FIGURE 6.3 PARTS LOCATION DIAGRAM, ACCESS PANEL ASSEMBLY UNITS  
EQUIPPED WITH MANUAL TILT**

Change 6

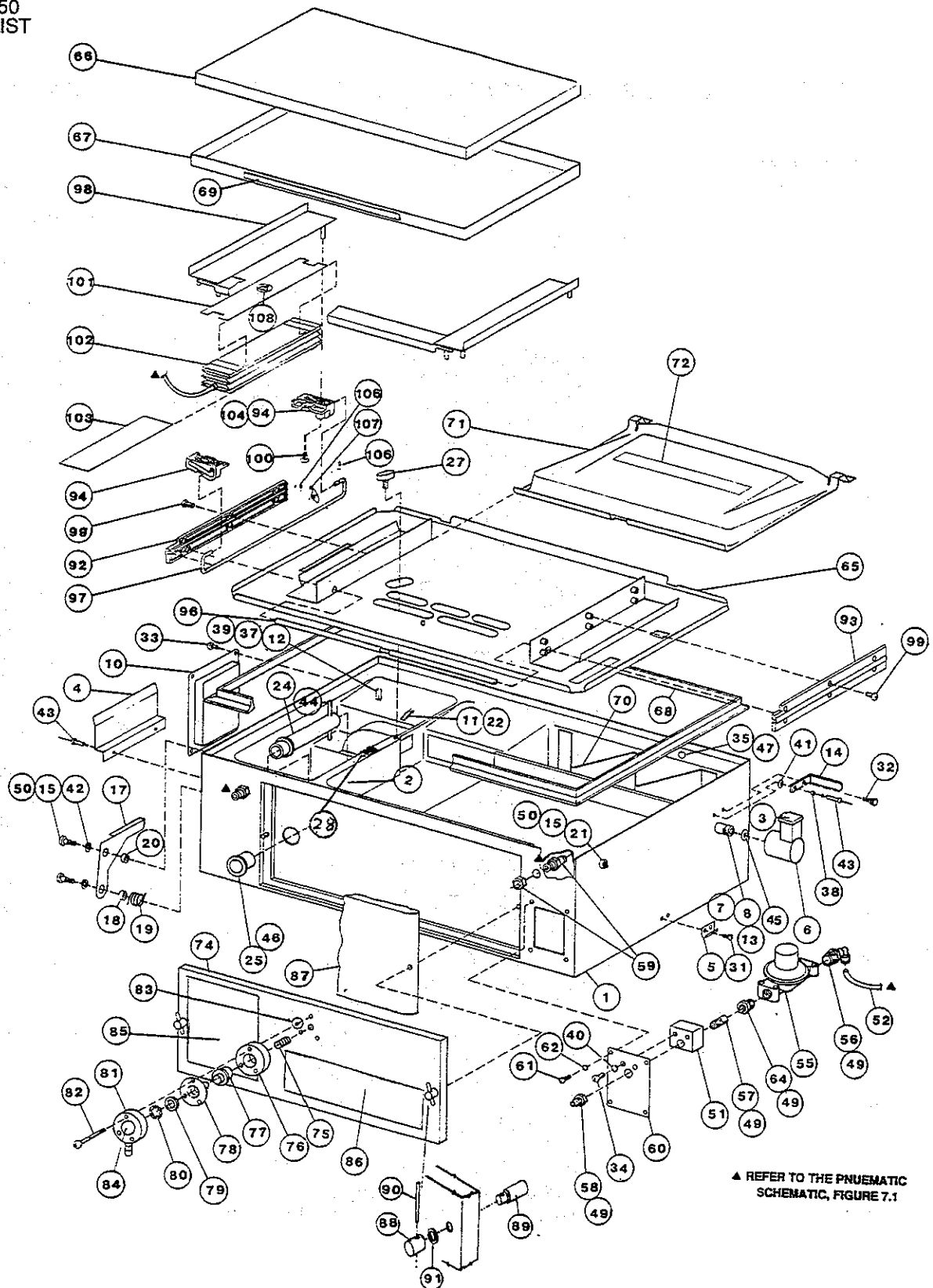


**TABLE 6.3 ACCESS PANEL ASSEMBLY, UNITS EQUIPPED WITH MANUAL TILT,  
PARTS LIST**  
(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		PANEL, ACCESS, REPLACEMENT KIT, (INCLUDES ITEMS 6,7,8,9,26,35,36,38, 39 AND 41) ENG	68 901 50
		SPN	68 901 51
		FRN	68 901 52
		GER	68 901 53
		ITL	68 901 54
2		GASKET, ACCESS DOOR, REUSABLE	68 120 03
3		CUFF, ACCESS DOOR	68 120 56
4		STRIP, ACCESS PANEL MOUNTING, FRONT	68 121 24
5		PLATE, STRIKER	68 121 55
6		REFER TO ITEM 37	
7		REFER TO ITEM 37	
8		REFER TO ITEM 37	
9		REFER TO ITEM 37	
10		HEAT SHIELD, FRONT	68 113 15
11		KNOB, RETAINER, LARGE	68 156 61
12		KNOB, RETAINER, SMALL	68 156 60
13		DOOR, ASSEMBLY	68 902 85
14		PIVOT, HINGE	68 510 05
15		SPRING, TORSION	68 510 10
16		MATTRESS TRAY STOPS	68 114 43
17		NOT USED	
18		LATCH ASSY, ACCESS DOOR, INCLUDES ITEM 20	68 510 26
19		NOT USED	
20		O RING, 3/8 ID x 1/2 OD x 1/16, NPRN	99 160 54
21		PIVOT, LATCH	68 510 40
22		STRIP, SEALING	68 512 10
23		NOT USED	
24		BUMPER, CLR POLYURETH, SELF ADH	78 293 10
25		SPACER, 1/2 OD X 0.166 ID X 3/8 LG	68 156 66
26		MATTRESS STOP GUIDE	68 504 43
27		NOT USED	
28		ADHESIVE, CYACRLT, LOC 404/EAST 910	AR
29		ADHESIVE, CLEAR 3M4693	AR
30		SCREW, 6-32 x 1/4 FL PH SS	99 023 94
31		SCREWM 6-32 x 1" TR PH SS NYLOK	99 025 23
32		SCREW, 6-32 x 3/8 FL PH SS	99 023 64
33		SCREW, 8-32 x 1/2 TR PH SS	99 031 99
34		SCREW, 8-32 x 7/8 FL PH SS	99 033 15
35		SCREW, 8 - 32 X 7/8 TR PH SS	99 033 19
36		REFER TO ITEM 37	
37		PAWL LATCH REPLACEMENT KIT	68 902 96
38		PINK QT/ ANIMALS LABEL	68 512 36
39		WARNING; INFANT SAFETY LABEL-ENG	68 501 20
		SPN	68 501 21
		FRN	68 501 22
		GER	68 501 23
		ITL	68 501 24
40		ADHESIVE, CLR, ELASTOMERC3M4693	99 902 53
41		PATENT PENDING LABEL	68 512 13

Change 7

C500/C550  
PARTS LIST



**FIGURE 6.4 PARTS LOCATION DIAGRAM, SHELL AND PNEUMATIC TILT DECK  
ASSEMBLY**

Change 7

TABLE 6.4 SHELL AND PNEUMATIC TILT DECK ASSEMBLY, PARTS LIST

(Sheet 1 of 4)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		SHELL	68 507 00
2		CASTING	26 100 30
3		FILLER PIPE CAP	12 209 01
4		POWER CORD DUCT	68 507 15
5		LATCH HOOK	24 144 01
6		HUMIDITY CHAMBER FILL SPOUT	26 200 02
7		SEALING WASHER	26 204 02
8		SEALING PIVOT NUT	26 205 00
9		NOT USED	
10		RECESSED OUTLET PANEL	68 500 15
		RECESSED OUTLET PANEL LABEL - C500, 120V ENG	68 500 20
		RECESSED OUTLET PANEL LABEL - C500, 120V SPN	68 500 21
		RECESSED OUTLET PANEL LABEL - C500, 120V FRN	68 500 22
		RECESSED OUTLET PANEL LABEL - C500, 220V GER	68 500 23
		RECESSED OUTLET PANEL LABEL - C500, 220/240V ENG	68 500 24
		RECESSED OUTLET PANEL LABEL - C500, 220/240V ITL	68 500 25
		RECESSED OUTLET PANEL LABEL - C500, 220/240V SPN	68 500 27
		RECESSED OUTLET PANEL LABEL - C500, 220/240V FRN	68 500 28
		RECESSED OUTLET PANEL LABEL - C550, 120V ENG	68 500 30
		RECESSED OUTLET PANEL LABEL - C550, 120V SPN	68 500 31
		RECESSED OUTLET PANEL LABEL - C550, 120V FRN	68 500 32
		RECESSED OUTLET PANEL LABEL - C550, 220V GER	68 500 33
		RECESSED OUTLET PANEL LABEL - C550, 220/240V ENG	68 500 34
		RECESSED OUTLET PANEL LABEL - C550, 220/240V ITL	68 500 35
		RECESSED OUTLET PANEL LABEL - C550, 220/240V SPN	68 500 37
		RECESSED OUTLET PANEL LABEL - C550, 220/240V FRN	68 500 38
11		GROUNDING SPRING	68 400 27
12		RAMP LATCH	68 110 42
13		HUMIDITY CHAMBER PIPE	68 110 43
14		FILL SPOUT STOP	68 110 50
15		SLOTTED SHOULDER SCREW	68 110 52
16		NOT USED	
17		LATCH HANDLE	68 110 55
18		SPACER NON-METALLIC	68 110 56
19		TORSION SPRING	68 110 57
20		SPACER NON - METALLIC	68 110 58
21		SPACER NON-METALLIC	68 110 59
22		HEX NUT, 6-32 KEPS	99 105 34
23		NOT USED	
24		CROSS FEED PIPE	68 112 05
25		FILTER GROMMET	68 112 15
26		NOT USED	
27		DECK RETAINING KNOB REPL KIT	68 901 22
28		GASKET	68 232 37

Change 7

**TABLE 6.4 SHELL AND PNEUMATIC TILTDECK ASSEMBLY, PARTS LIST**

(Sheet 2 of 4)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
29		NOT USED	
30		NOT USED	
31		SCREW, 4 - 40 X 5/16 FL PH SS	99 010 77
32		THUMB SCREW, 4 - 40 X 1/4	99 010 63
33		SCREW, 4 - 40 X 5/16 TR PH SS	99 010 76
34		SCREW, 10 - 32 X 1/2 TR PH SS	99 042 01
35		SCREW, 8 - 32 X 3/8 RD PH SS	99 031 37
36		NOT USED	
37		HEX NUT, 8 - 32 SS	99 106 01
38		SPACER, 0.250 OD X 0.40 ID X 0.25 THK	99 121 96
39		LOCK WASHER, #8	99 122 95
40		LOCK WASHER #10	99 124 16
41		WASHER, 0.560 OD X 0.25 ID PLASTIC	99 125 57
42		WASHER, 0.38 OD X 0.62 ID	99 126 70
43		POP RIVET, 1/8 D LG FLANGE	99 131 70
44		PIN, 1/8 DIA X 1 1/2 LG SS	99 143 96
45		O-RING 5/8 X 3/4 X 1/16	99 161 04
46		DOW CORNING LUBE #111	AR
47		WHITE RTV COMPOUND	AR
48		NOT USED	
49		TEFLON PIPE SEALANT	AR
50		LOCTITE #222	AR
51		AIR SUPPLY MANIFOLD	68 504 33
52		CLEAR TUBING 20" LONG 0.250 OD (REFER TO THE PNEUMATIC SCHEMATIC FIGURE 7.1)	68 505 11
53		BLUE TUBING 22" LONG 0.250 OD (REFER TO THE PNEUMATIC SCHEMATIC FIGURE 7.1)	68 505 21
54		RED TUBING 37" LONG 0.250 OD (REFER TO THE PNEUMATIC SCHEMATIC FIGURE 7.1)	68 505 31
55		REGULATOR, 2.1 PSIG PRESET	68 504 49
56		TUBING FITTING, MALE ELBOW	68 504 01
57		MUFFLER/FILTER ELEMENT, 1/8 NPT	68 504 45
58		AIR-IN VALVE, MALE DISS	78 435 26
59		TUBING FITTING, BLKHD UNION	68 504 19
60		REGULATOR MOUNTING PLATE	68 507 10
61		SCREW, 6 - 32 X 3/8 TR PH SS	99 023 31
62		LOCK WASHER SP #6	99 122 16
63		TIE WRAPS FOR TUBING (NOT SHOWN)	12 995 00
64		REDUCER BUSHING, 1/4 NPT X 1/8 FNPT	68 504 09
65		MAIN DECK	68 504 40
66		MATTRESS	68 142 71

TABLE 6.4 SHELL AND PNEUMATIC TILT DECK ASSEMBLY, PARTS LIST

(Sheet 3 of 4)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
67		MATTRESS TRAY ASSY ENG (INCLUDES ITEM 69)	68 901 40
		MATTRESS TRAY ASSY SPN	68 901 41
		MATTRESS TRAY ASSY FRN	68 901 42
		MATTRESS TRAY ASSY GER	68 901 43
		MATTRESS TRAY ASSY ITL	68 901 44
68		HOOD GASKET	12 216 00
69		MATTRESS TRAY WARNING LABEL ENG	68 160 30
		MATTRESS TRAY WARNING LABEL SPN	68 160 31
		MATTRESS TRAY WARNING LABEL FRN	68 160 32
		MATTRESS TRAY WARNING LABEL GER	68 160 33
		MATTRESS TRAY WARNING LABEL ITL	68 160 34
70		HUMIDITY BAFFLE	26 101 02
71		PLENUM ASSEMBLY (INCLUDES ITEM 72)	68 901 21
72		PLENUM LABEL	68 142 26
73		NOT USED	
74		FILTER COVER ASSEMBLY, ENG (INCLUDES ITEM 75 THRU 88)	68 507 40
		FILTER COVER ASSEMBLY, SPN (INCLUDES ITEM 75 THRU 88)	68 507 41
		FILTER COVER ASSEMBLY, FRN (INCLUDES ITEM 75 THRU 88)	68 507 42
		FILTER COVER ASSEMBLY, GER (INCLUDES ITEM 75 THRU 88)	68 507 43
		FILTER COVER ASSEMBLY, ITL (INCLUDES ITEM 75 THRU 88)	68 507 44
75		COMPRESSION SPRING	68 130 65
76		CYLINDER	68 130 55
77		FILTER CARTRIDGE	68 130 67
78		DIAPHRAGM	68 130 57
79		NON-METALLIC WASHER	68 130 51
80		RETAINING RING, WAL 5105-62 SS	99 182 93
81		CAP	68 130 60
82		SCREW, 6-32 X 1.75" OV PH SS	99 026 18
83		NON-METALLIC WASHER	68 130 52
84		OXYGEN LIMITER LABEL, ENG	68 133 35
		OXYGEN LIMITER LABEL, SPN	68 133 36
		OXYGEN LIMITER LABEL, FRN	68 133 37
		OXYGEN LIMITER LABEL, GER	68 133 38
		OXYGEN LIMITER LABEL, ITL	68 133 34
85		OXYGEN CONCENTRATION LABEL, ENG	68 133 10
		OXYGEN CONCENTRATION LABEL, SPN	68 133 11
		OXYGEN CONCENTRATION LABEL, FRN	68 133 12
		OXYGEN CONCENTRATION LABEL, GER	68 133 13
		OXYGEN CONCENTRATION LABEL, ITL	68 133 15

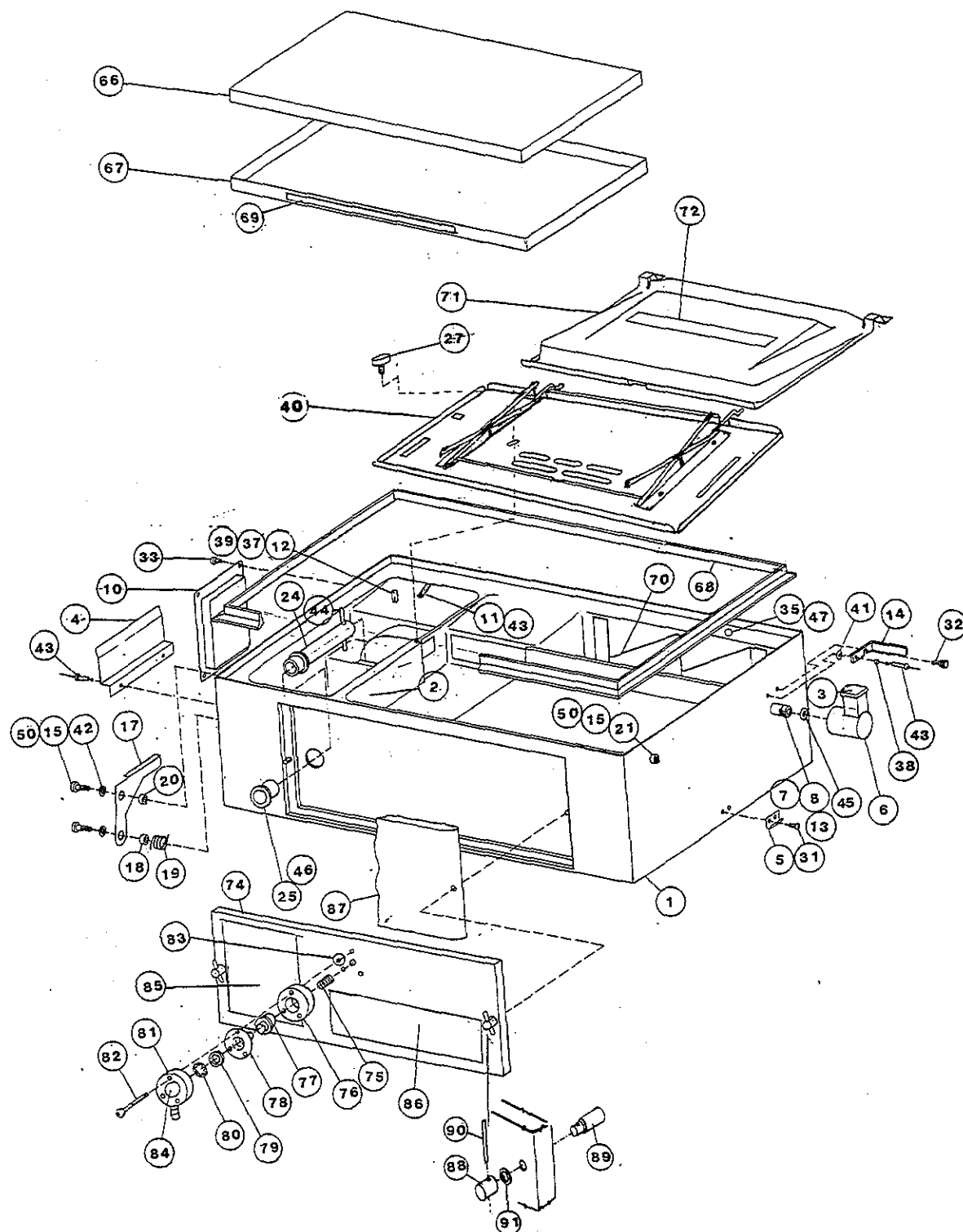
**TABLE 6.4 SHELL AND PNEUMATIC TILT DECK ASSEMBLY, PARTS LIST**

(Sheet 4 of 4)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
86		FILTER COVER LABEL, ENG	26 330 60
		FILTER COVER LABEL, SPN	26 330 61
		FILTER COVER LABEL, FRN	26 330 62
		FILTER COVER LABEL, GER	26 330 63
		FILTER COVER LABEL, ITL	26 330 64
87		AIR FILTER (BOX OF 4)	26 945 70
88		FILTER COVER KNOB	68 130 30
89		FILTER COVER KNOB SHAFT	68 130 35
90		FILTER COVER KNOB HANDLE	68 130 40
91		WASHER, 0.38 ID X 0.62 OD X 0.15 THK NYLON	99 126 11
92		RIGHT DECK RAIL	68 504 30
93		LEFT DECK RAIL	68 504 37
94		RIGHT DECK RETAINER (WITHOUT PIN)	68 504 34
95		LEFT DECK RETAINER (WITHOUT PIN)	68 504 35
96		PLENUM ROD	68 504 31
97		MATTRESS TRAY STABILIZER BAR	68 504 36
98		TRAY SUPPORT	68 504 38
99		SCREW, 4 - 40 X 1/4" TR PH SS NYLOC	99 010 67
100		SCREW, 4 - 40 X 1/2" TR PH SS NYLOC	99 011 63
101		BELLOWS TOP PLATE (INCLUDES LABEL, ITEM 108)	68 901 20
102		BELLOWS	68 504 29
103		BELLOWS BOTTOM PLATE	68 504 28
104		STABILIZER BAR RETAINER RIGHT-HAND WITH PIN	68 504 65
105		STABILIZER BAR RETAINER LEFT-HAND WITH PIN (NOT SHOWN)	68 504 35
106		RETAINING RING	99 181 47
107		LOCK-UP CLIP	68 504 44
108		LABEL, MANUAL REFERENCE SYMBOL (INCLUDED WITH ITEM 101)	68 160 05

Change 2

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**FIGURE 6.5 PARTS LOCATION DIAGRAM, SHELL AND MANUAL TILT DECK  
ASSEMBLY**



TABLE 6.5 SHELL AND MANUAL TILT DECK ASSEMBLY, PARTS LIST

(Sheet 1 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		SHELL	68 507 00
2		CASTING	26 100 30
3		FILLER PIPE CAP	12 209 01
4		POWER CORD DUCT	68 507 15
5		LATCH HOOK	24 144 01
6		HUMIDITY CHAMBER FILL SPOUT	26 200 02
7		SEALING WASHER	26 204 02
8		SEALING PIVOT NUT	26 205 00
9		NOT USED	
10		RECESSED OUTLET PANEL	68 500 15
		RECESSED OUTLET PANEL LABEL - C500, 120V ENG	68 500 20
		RECESSED OUTLET PANEL LABEL - C500, 120V SPN	68 500 21
		RECESSED OUTLET PANEL LABEL - C500, 120V FRN	68 500 22
		RECESSED OUTLET PANEL LABEL - C500, 220V GER	68 500 23
		RECESSED OUTLET PANEL LABEL - C500, 220/240V ENG	68 500 24
		RECESSED OUTLET PANEL LABEL - C500, 220/240V ITL	68 500 25
		RECESSED OUTLET PANEL LABEL - C500, 220/240V SPN	68 500 27
		RECESSED OUTLET PANEL LABEL - C500, 220/240V FRN	68 500 28
		RECESSED OUTLET PANEL LABEL - C550, 120V ENG	68 500 30
		RECESSED OUTLET PANEL LABEL - C550, 120V SPN	68 500 31
		RECESSED OUTLET PANEL LABEL - C550, 120V FRN	68 500 32
		RECESSED OUTLET PANEL LABEL - C550, 220V GER	68 500 33
		RECESSED OUTLET PANEL LABEL - C550, 220/240V ENG	68 500 34
		RECESSED OUTLET PANEL LABEL - C550, 220/240V ITL	68 500 35
		RECESSED OUTLET PANEL LABEL - C550, 220/240V SPN	68 500 37
		RECESSED OUTLET PANEL LABEL - C550, 220/240V FRN	68 500 38
11		LEAF SPRING	68 110 41
12		RAMP LATCH	68 110 42
13		HUMIDITY CHAMBER PIPE	68 110 43
14		FILL SPOUT STOP	68 110 50
15		SLOTTED SHOULDER SCREW	68 110 52
16		NOT USED	
17		LATCH HANDLE	68 110 55
18		SPACER NON-METALLIC	68 110 56
19		TORSION SPRING	68 110 57
20		SPACER NON - METALLIC	68 110 58
21		SPACER NON-METALLIC	68 110 59
22		NOT USED	
23		NOT USED	
24		CROSS FEED PIPE	68 112 05
25		FILTER GROMMET	68 112 15
26		NOT USED	
27		DECK RETAINING KNOB REPL KIT	68 901 22
28		NOT USED	

**TABLE 6.5 SHELL AND MANUAL TILT DECK ASSEMBLY, PARTS LIST**

(Sheet 2 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
29		NOT USED	
30		NOT USED	
31		SCREW, 4 - 40 X 5/16 FL PH SS	99 010 77
32		THUMB SCREW, 4 - 40 X 1/4	99 010 63
33		SCREW, 4 - 40 X 5/16 TR PH SS	99 010 76
34		NOT USED	
35		SCREW, 8 - 32 X 3/8 RD PH SS	99 031 37
36		NOT USED	
37		HEX NUT, 8 - 32 SS	99 106 01
38		SPACER, 0.250 OD X 0.40 ID X 0.25 THK	99 121 96
39		LOCK WASHER, #8	99 122 95
40		MAIN DECK MANUAL TILT (REFER TO TABLE 6.6)	
41		WASHER, 0.560 OD X 0.25 ID PLASTIC	99 125 57
42		WASHER, 0.38 OD X 0.62 ID	99 126 70
43		POP RIVET, 1/8 D LG FLANGE	99 131 70
44		PIN, 1/8 DIA X 1 1/2 LG SS	99 143 96
45		O-RING 5/8 X 3/4 X 1/16	99 161 04
46		DOW CORNING LUBE #111	AR
47		WHITE RTV COMPOUND	AR
48		NOT USED	
49		NOT USED	
50		LOCTITE #222	AR
51		NOT USED	
52		NOT USED	
53		NOT USED	
54		NOT USED	
55		NOT USED	
56		NOT USED	
63		NOT USED	
64		REDUCER BUSHING, 1/4 NPT X 1/8 FNPT	68 504 09
65		NOT USED	
66		MATTRESS	68 142 71
67		MATTRESS TRAY ASSY ENG (INCLUDES ITEM 69)	68 901 40
		MATTRESS TRAY ASSY SPN	68 901 41
		MATTRESS TRAY ASSY FRN	68 901 42
		MATTRESS TRAY ASSY GER	68 901 43
		MATTRESS TRAY ASSY ITL	68 901 44
68		HOOD GASKET	12 216 00
69		MATTRESS TRAY WARNING LABEL ENG	68 160 30
69		MATTRESS TRAY WARNING LABEL SPN	68 160 31
69		MATTRESS TRAY WARNING LABEL FRN	68 160 32
69		MATTRESS TRAY WARNING LABEL GER	68 160 33
69		MATTRESS TRAY WARNING LABEL ITL	68 160 34

TABLE 6.5 SHELL AND MANUAL TILT DECK ASSEMBLY, PARTS LIST

(Sheet 3 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
70		HUMIDITY BAFFLE	26 101 02
71		PLENUM ASSEMBLY (INCLUDES ITEM 72)	68 901 21
72		PLENUM LABEL	68 141 26
73		NOT USED	
74		FILTER COVER ASSEMBLY, ENG (INCLUDES ITEM 75 THRU 88)	68 507 40
		FILTER COVER ASSEMBLY, SPN (INCLUDES ITEM 75 THRU 88)	68 507 41
		FILTER COVER ASSEMBLY, FRN (INCLUDES ITEM 75 THRU 88)	68 507 42
		FILTER COVER ASSEMBLY, GER (INCLUDES ITEM 75 THRU 88)	68 507 43
		FILTER COVER ASSEMBLY, ITL (INCLUDES ITEM 75 THRU 88)	68 507 44
75		COMPRESSION SPRING	68 130 65
76		CYLINDER	68 130 55
77		FILTER CARTRIDGE	68 130 67
78		DIAPHRAGM	68 130 57
79		NON-METALLIC WASHER	68 130 51
80		RETAINING RING, WAL 5105-62 SS	99 182 93
81		CAP	68 130 60
82		SCREW, 6- 32 X 1.75" OV PH SS	99 026 18
83		NON-METALLIC WASHER	68 130 52
84		OXYGEN LIMITER LABEL, ENG	68 133 35
		OXYGEN LIMITER LABEL, SPN	68 133 36
		OXYGEN LIMITER LABEL, FRN	68 133 37
		OXYGEN LIMITER LABEL, GER	68 133 38
		OXYGEN LIMITER LABEL, ITL	68 133 34
85		OXYGEN CONCENTRATION LABEL, ENG	68 133 10
		OXYGEN CONCENTRATION LABEL, SPN	68 133 11
		OXYGEN CONCENTRATION LABEL, FRN	68 133 12
		OXYGEN CONCENTRATION LABEL, GER	68 133 13
		OXYGEN CONCENTRATION LABEL, ITL	68 133 15
86		FILTER COVER LABEL, ENG	26 330 60
		FILTER COVER LABEL, SPN	26 330 61
		FILTER COVER LABEL, FRN	26 330 62
		FILTER COVER LABEL, GER	26 330 63
		FILTER COVER LABEL, ITL	26 330 64
87		AIR FILTER (BOX OF 4)	26 945 70
88		FILTER COVER KNOB	68 130 30
89		FILTER COVER KNOB SHAFT	68 130 35
90		FILTER COVER KNOB HANDLE	68 130 40
91		WASHER, 0.38 ID X 0.62 OD X 0.15 THK NYLON	99 126 11

Change 2

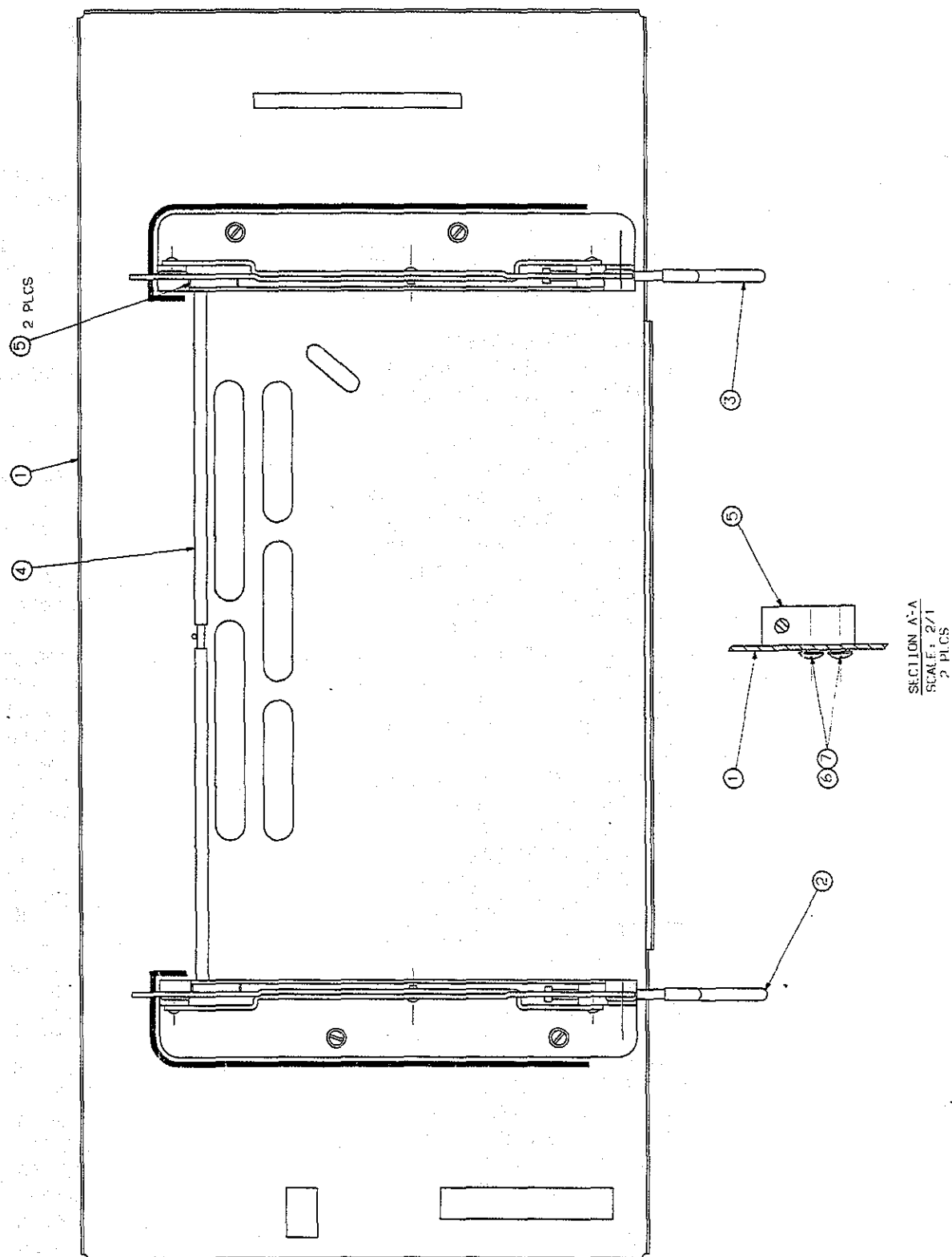


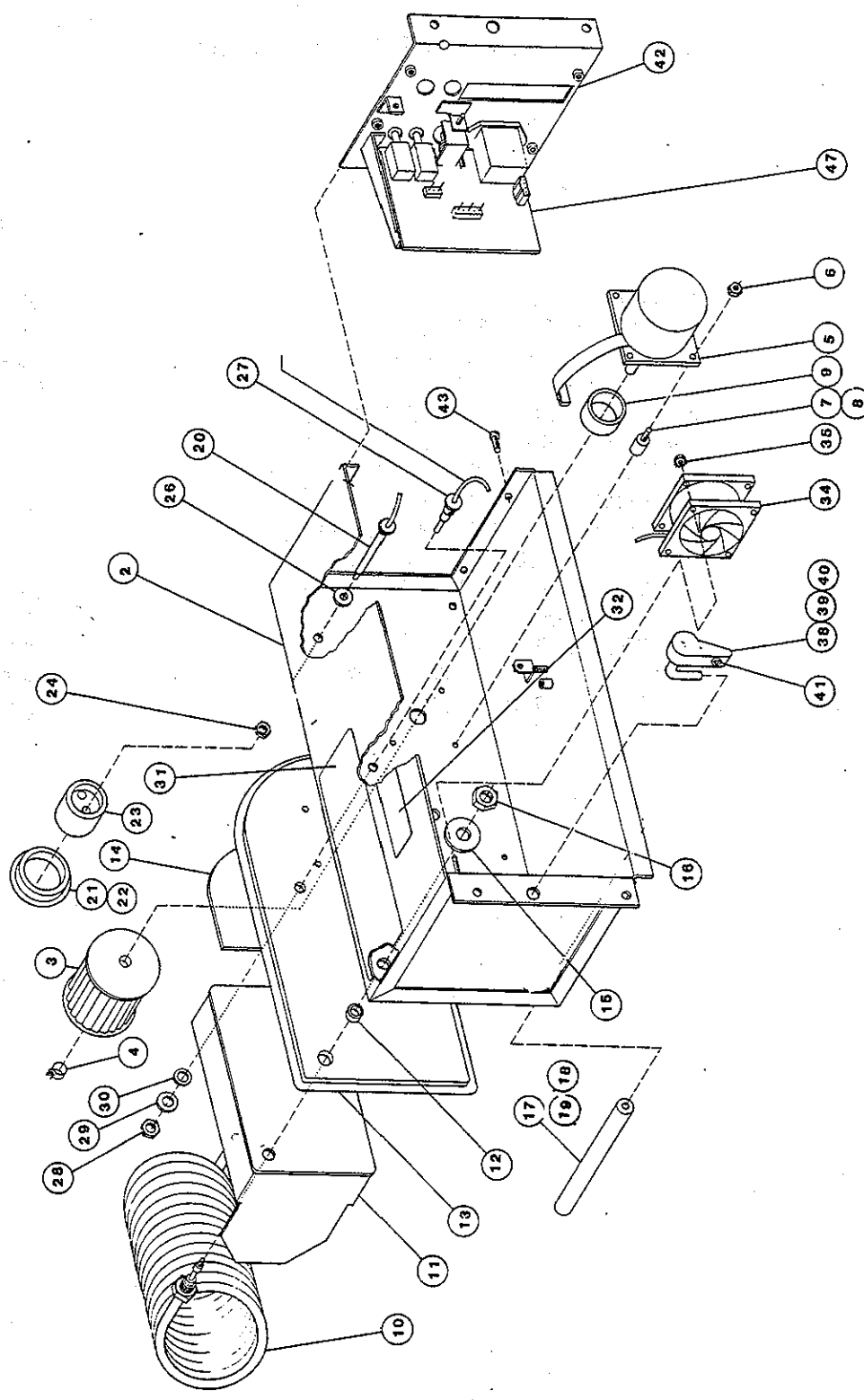
FIGURE 6.6 PARTS LOCATION DIAGRAM, MANUAL TILT DECK ASSEMBLY

TABLE 6.6 MANUAL TILT DECK ASSEMBLY, PARTS LIST

(Sheet 1 of 1)

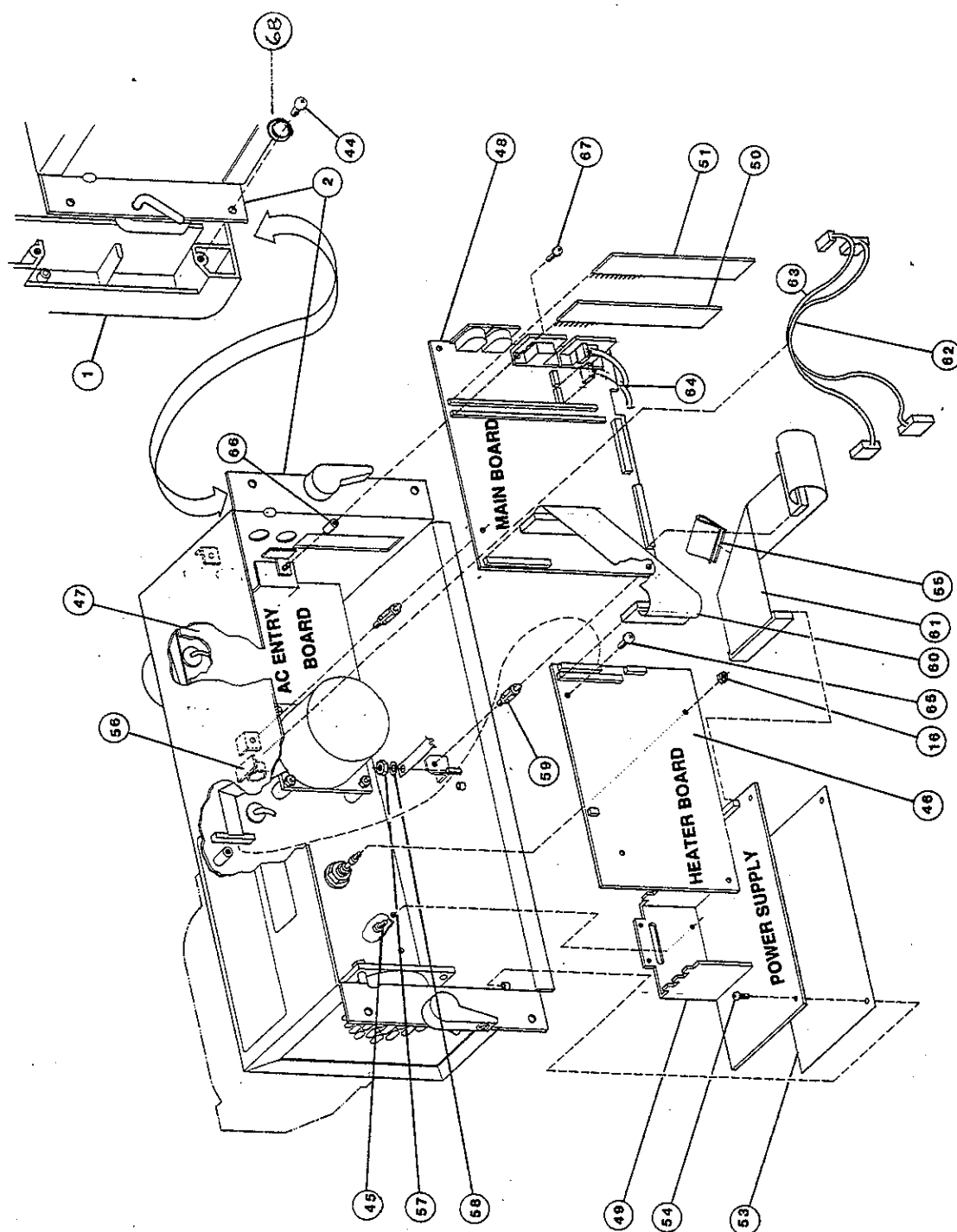
ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		MAIN DECK	68 504 41
2		ELEVATOR ASSEMBLY, LEFT HAND, ENG	68 907 06
		ELEVATOR ASSEMBLY, LEFT HAND, SPN	68 907 07
		ELEVATOR ASSEMBLY, LEFT HAND, FRN	68 907 08
		ELEVATOR ASSEMBLY, LEFT HAND, GER	68 907 09
		ELEVATOR ASSEMBLY, LEFT HAND, ITL	68 907 10
3		ELEVATOR ASSEMBLY, RIGHT HAND, ENG	68 907 00
		ELEVATOR ASSEMBLY, RIGHT HAND, SPN	68 907 01
		ELEVATOR ASSEMBLY, RIGHT HAND, FRN	68 907 02
		ELEVATOR ASSEMBLY, RIGHT HAND, GER	68 907 03
		ELEVATOR ASSEMBLY, RIGHT HAND, ITL	68 907 04
4		PLENUM SHAFT	68 141 36
5		PLENUM PIVOT ROD	68 521 45
6		SCREW, 6 - 32 X 5/16 TR PH SS	99 022 98
7		LOCK WASHER NO. 6 SP SS	99 122 16

Change 1



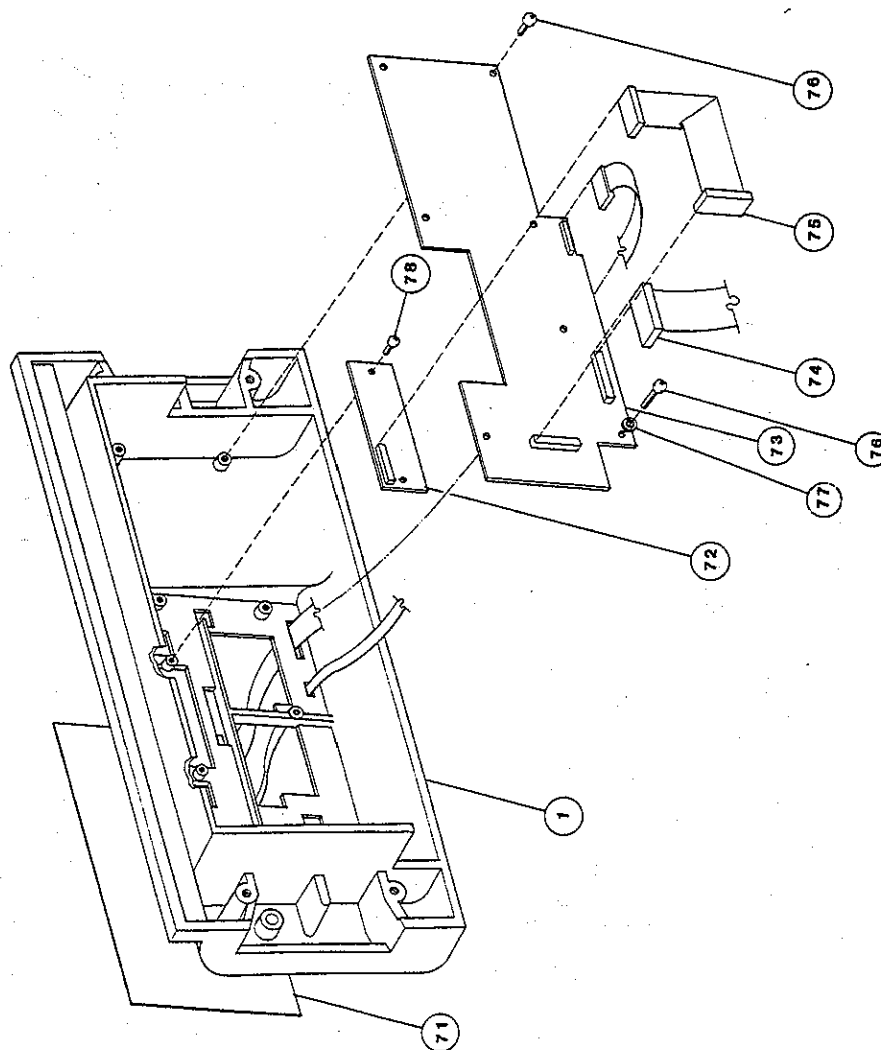
**FIGURE 6.7 PARTS LOCATION DIAGRAM, CONTROLLER ASSEMBLY  
(SHEET 1 OF 3)**

Change 1



**FIGURE 6.7 PARTS LOCATION DIAGRAM, CONTROLLER ASSEMBLY  
(SHEET 2 OF 3)**

Change 6



**FIGURE 6.7 PARTS LOCATION DIAGRAM, CONTROLLER ASSEMBLY  
(SHEET 3 OF 3)**



TABLE 6.7 CONTROLLER ASSEMBLY, PARTS LIST

CONTROLLER, C500 120V ENG, SPN AND FRN .....	68 230 70, 71 AND 72
CONTROLLER, C500 220V ENG, SPN, FRN AND ITL .....	68 230 80, 81, 82 AND 84
CONTROLLER, C500 220V GER .....	68 230 83
CONTROLLER, C550 120V ENG, SPN AND FRN .....	68 231 70, 71 AND 72
CONTROLLER, C550 220V ENG, SPN, FRN AND ITL .....	68 231 80, 81, 82 AND 84
CONTROLLER, C550 220V GER .....	68 231 83

(Sheet 1 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		CONTROLLER HOUSING	68 230 05
2		CONTROLLER CHASSIS	68 230 00
3		IMPELLER	68 205 41
4		HOSE CLAMP	20 015 65
5		MOTOR ASSEMBLY	68 230 20
6		HEX NUT, 8-32 HEX, SS	99 106 01
7		VIBRATION ISOLATOR	68 230 24
8		LOCTITE #222	AR
9		MOTOR SHAFT SEAL	68 230 27
10		HEATER, 120 V	68 230 35
		HEATER, 240 V	68 230 36
11		HEATER BAFFLE PLATE	68 208 20
12		HEATER PLATE SPACER	26 516 05
13		GASKET	26 503 00
14		STIFFENER PLATE	68 230 46
15		LOCK WASHER 7/16" ID	99 127 41
16		HEATER ASSEMBLY NUT, 6-32 HEX	99 105 70
17		POST BUMPER	68 215 12
18		COMPOUND, LOCTITE RC680	AR
19		LOCQUIC PRIMER, GR "T" #47 - 56	AR
20		DUAL THERMISTOR ASSEMBLY	68 214 76
21		GASKET	26 501 00
22		CEMENT, 3M, EC800	AR
23		THERMOSTAT PLUG	12 512 01
24		NUT, HEX, 15/32- 32 UNF 2B	68 215 11
25		NOT USED	
26		SHOULDER WASHER, INSULATING	99 127 69
27		AIR FLOW THERMISTOR ASSEMBLY	68 214 81
28		NUT, 3/8" X 24, HEX, BR, NI, THIN	99 111 80
29		FLAT WASHER, 3/8" ID X 0.62 OD	99 126 70
30		FIBER WASHER	17 803 40
31		HEATER CAUTION LABEL	68 208 30
32		NOT USED	
33		CHASSIS STERILIZING CAUTION LABEL, MOUNTED DIRECTLY UNDER ITEM 23, ENG	68 212 15
		SPN	68 212 17
		FRN	68 212 18
		GER	69 212 19
		ITL	68 212 20

Change 7

**TABLE 6.7 CONTROLLER ASSEMBLY, PARTS LIST**

(Sheet 2 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
34		COOLING FAN ASSEMBLY	68 230 60
35		HEX NUT, 6 - 32 KEPS	99 165 34
36		NOT USED	
38		O-RING, 0.370 ID C 0.40 W	99 160 55
39		LATCH ASSEMBLY, RIGHT	68 230 11
40		LATCH ASSEMBLY, LEFT	68 230 10
41		MANUAL REFERENCE LABEL	68 160 05
42		RIGHT SIDE CHASSIS	68 230 01
43		SCREW, 8 - 32 X 3/8" PHILLIPS HEAD	99 031 38
44		SCREW, 6 - 32 X 3/8 PHILLIPS HEAD	99 041 33
45		SCREW, 6 - 32 X 1/4 PN PH SS SEMS, EX	99 022 83
46		HEATER BOARD ASSY (REF TO TABLE 6.10) 100/120V	68 366 70
		220/240V	68 366 71
		100V	68 366 72
47		AC ENTRY BOARD, (REFER TO TABLE 6.9) 100 VAC	68 365 72
		120 VAC	68 365 70
		220/240 VAC	68 365 71
		230 VAC (GER)	68 365 73
48		MAIN BOARD (REFER TO TABLE 6.11)	
		120V ENGLISH	68 908 40
		120V US AND CANADA ONLY	68 908 41
		INTERNATIONAL	68 908 42
		GERMAN	68 908 43
		RUSSIAN	68 908 44
49		POWER SUPPLY	68 230 30
50		MONITOR HYBRID BOARD	68 367 70
51		CONTROL HYBRID BOARD	68 368 70
52		NOT USED	
53		POWER SUPPLY INSULATOR	68 230 28
54		SCREW, 6 - 32 X 1/4" SQ, CONE, WHR, SEMS	99 022 84
55		RIBBON CABLE CLAMP	17 062 11
56		CORD CLIP	17 725 44
57		NUT, 6 - 32, HEX FL KEPS	99 105 70
58		FLAT WASHER, #6 SS	99 122 03
59		PCB SPACER, 0.50" LG PLASTIC	17 062 72
60		CABLE ASSEMBLY MAIN BOARD TO HEATER BOARD	68 231 05
61		CABLE ASSEMBLY, POWER SUPPLY TO MAIN BOARD	68 231 07
62		CABLE ASSEMBLY, POWER SUPPLY TO AC ENTRY BD	68 231 08
63		CABLE ASSEMBLY, AC ENTRY BOARD TO HEATER BD	68 231 00
64		CABLE ASSEMBLY, AC ENTRY BOARD TO MAIN BOARD	68 231 03
65		SCREW, 6 - 32 1/4" SQ CON SEMS	99 022 84
66		THREADED STANDOFF	99 116 44
67		SCREW, 4 - 40 X 3/8" SEMS	99 011 13
68		LOCK WASHER, INT TOOTH #10 SS	99 123 92
69		NOT USED	
70		NOT USED	

Change 6

TABLE 6.7 CONTROLLER ASSEMBLY, PARTS LIST

(Sheet 3 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
71		FRONT PANEL OVERLAY C550 ENG	68 231 50
		C550 INTERNATIONAL	68 231 52
		FRONT PANEL OVERLAY C500 ENG	68 230 50
		C500 GER	68 230 53
		C500 INTERNATIONAL	68 230 52
72		VACUUM FLUORESCENT DISPLAY MODULE	17 777 39
73		DISPLAY BOARD ASSEMBLY C500 (REFER TO TABLE 6.12)	68 371 71
		DISPLAY BOARD ASSEMBLY C550 (REFER TO TABLE 6.12)	68 371 70
74		CABLE ASSEMBLY, MAIN BOARD TO DISPLAY BD	68 231 04
75		CABLE ASSEMBLY, VFD MODULE TO DISPLAY BD	68 231 06
76		SCREW, 6-32 1/4 SEMS	99 022 84
77		NOT USED	
86		FILTER COVER LABEL ENG	26 330 60
		FILTER COVER LABEL SPN	26 330 61
		FILTER COVER LABEL FRN	26 330 62
		FILTER COVER LABEL GER	26 330 63
		FILTER COVER LABEL ITL	26 330 64
87		FILTER	26 313 70
88		FILTER COVER KNOB	68 130 30
89		FILTER COVER KNOB SHAFT	68 130 35
90		KNOB HANDLE	68 130 40

Change 6

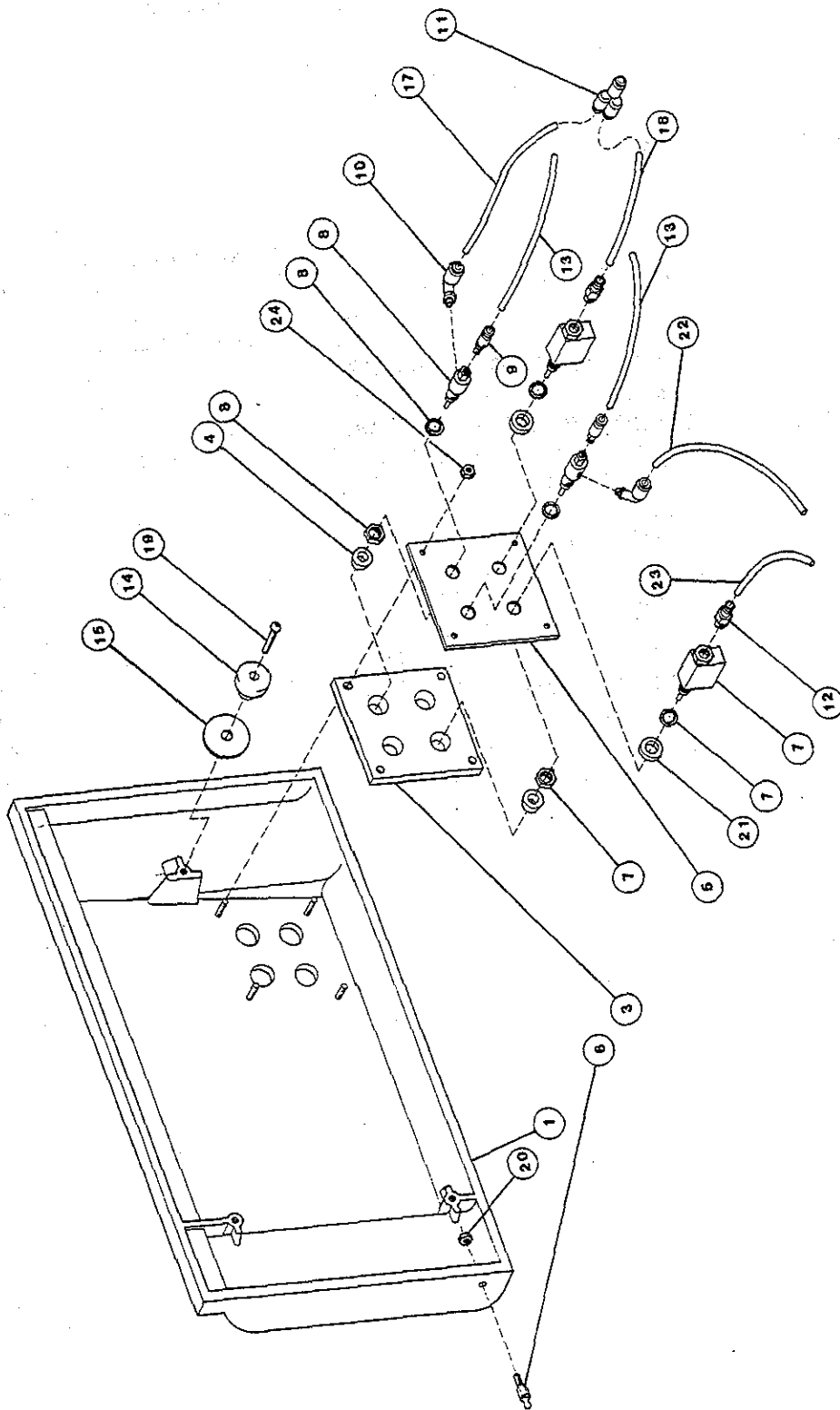


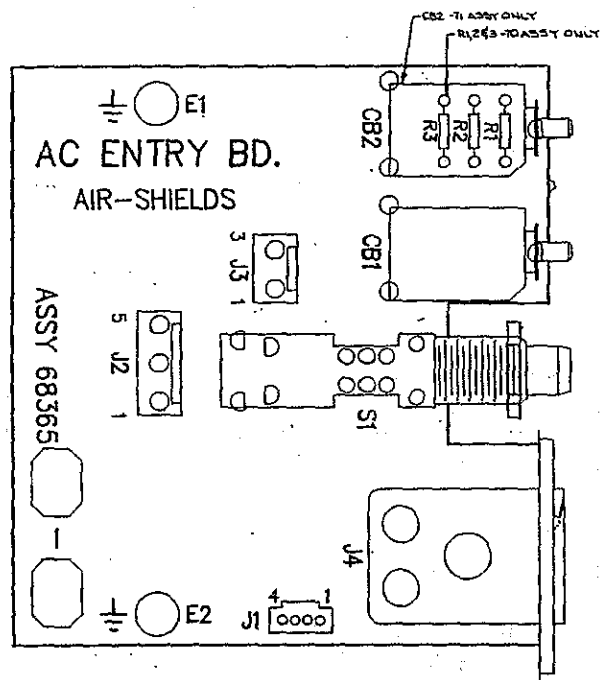
FIGURE 6.8 PARTS LOCATION DIAGRAM, PNEUMATIC PANEL ASSEMBLY

TABLE 6.8 PNEUMATIC PANEL ASSEMBLY, PARTS LIST

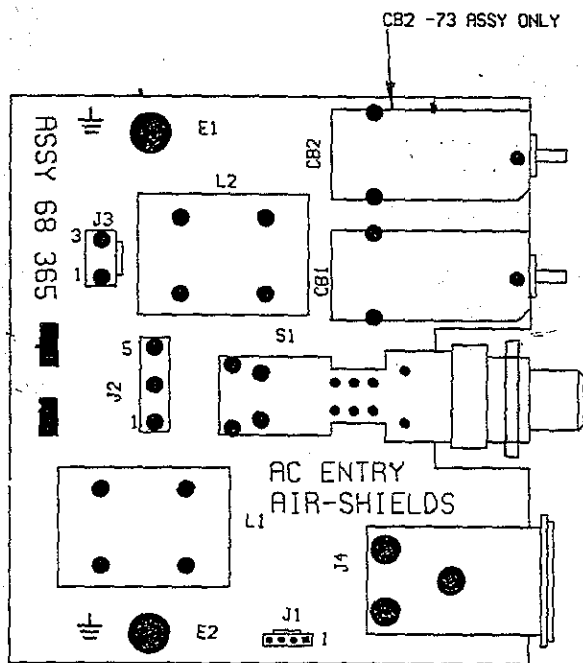
(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
1		PNEUMATIC TILT BEZEL	68 504 00
2		PNEUMATIC TILT BEZEL LABEL, ENG	68 504 10
		PNEUMATIC TILT BEZEL LABEL, SPN	68 504 11
		PNEUMATIC TILT BEZEL LABEL, FRN	68 504 12
		PNEUMATIC TILT BEZEL LABEL, GER	68 504 13
		PNEUMATIC TILT BEZEL LABEL, ITL	68 504 14
3		KEYPAD	68 504 02
4		KEYPAD SEALING RING	68 504 03
5		KEYPAD MOUNTING PLATE	68 504 04
6		BALL STUD, 6 - 32 EXT THREAD	68 504 05
7		CONTROL VALVE, MINI TWO WAY, MODIFIED	68 504 68
8		CONTROL VALVE, MINI TWO WAY	68 504 21
9		TUBING FITTING, MALE, STRAIGHT, CONN	68 504 25
10		TUBING FITTING, ELBOW, MALE	68 504 27
11		TUBING FITTING, UNION "Y"	68 504 23
12		TUBING FITTING, MALE STRAIGHT, CONN	68 504 26
13		CLEAR TUBING, 3" LONG	68 505 12
14		RETAINING KNOB	68 156 67
15		FLAT WASHER, DELRIN	99 122 07
16		NOT USED	
17		BLUE TUBING, 3" LONG	68 505 22
18		BLUE TUBING 2-1/2" LONG	68 505 23
19		SCREW, 6 - 32 X 9/16" TR PH SS NYLOCK	99 024 19
20		NUT, #6 HEX KEPS	99 105 34
21		NYLON WASHER, 0.505 OD X 0.75 ID X 0.125 THK	99 127 74
22		RED TUBING, 3 1/2" LONG	68 505 32
23		RED TUBING, 2 1/2" LONG	68 505 33
24		NUT, NO. 4 KEPS	99 103 33

Change 6



68 365 70, 71 and 72



68 365 73

FIGURE 6.9 PARTS LOCATION DIAGRAM, AC ENTRY BOARD

Change 4

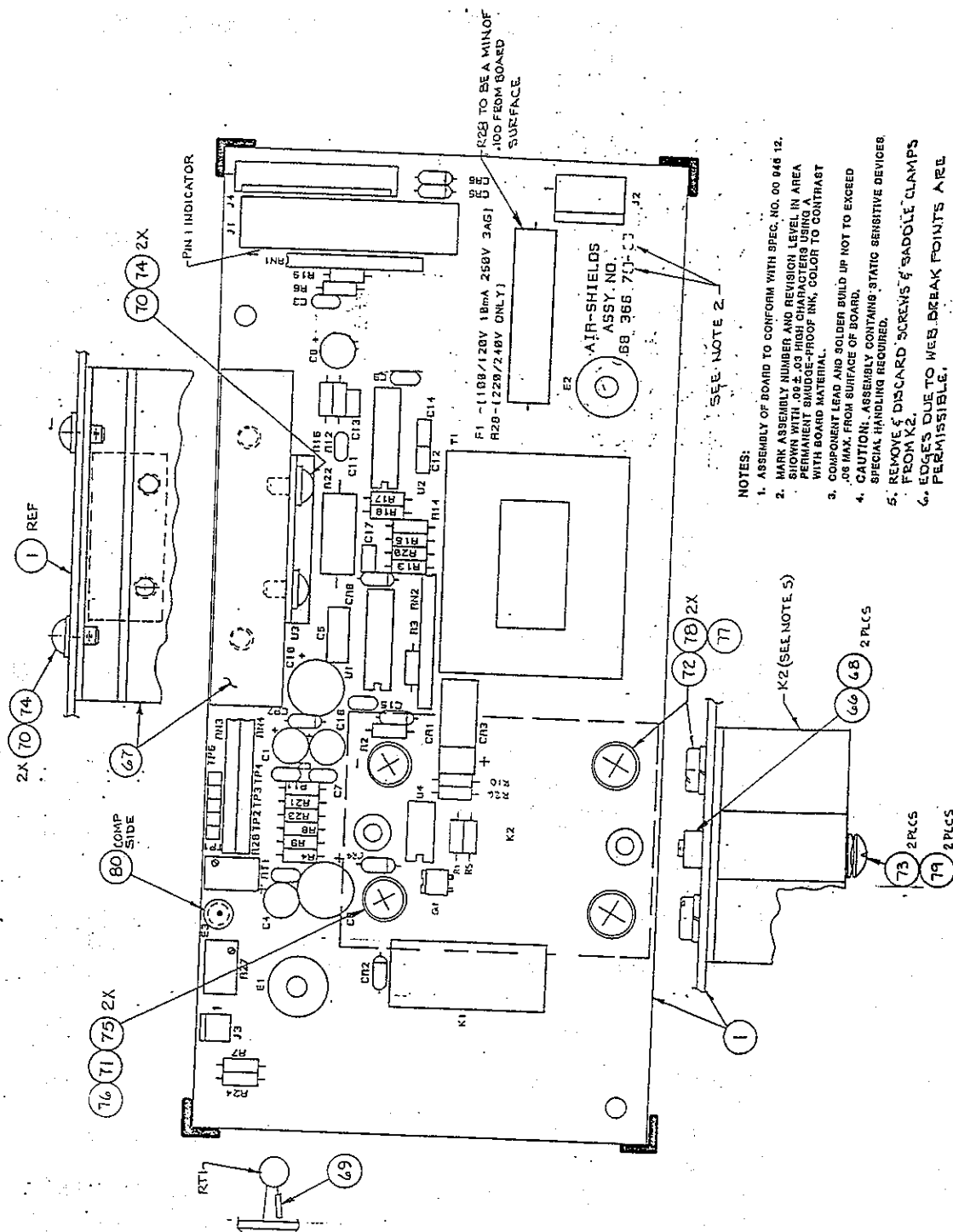
**TABLE 6.9 AC ENTRY BOARD, C500/550 QT®, C500/550 QT® MODEL XL,  
PARTS LIST**

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		AC ENTRY BOARD 120 Vac .....	68 365 70
		AC ENTRY BOARD 220/240 Vac .....	68 365 71
		AC ENTRY BOARD 100 Vac .....	68 365 72
		AC ENTRY BOARD 230 Vac GERMAN .....	68 365 73
1		NOT USED	
2		NOT USED	
3		NOT USED	
4		NOT USED	
5		NOT USED	
6		NOT USED	
7		NOT USED	
8		NOT USED	
9		NOT USED	
10	S1	PUSHBUTTON SWITCH .....	17 682 46
		LAMP FOR SWITCH 17 682 46 .....	17 807 78
11		NOT USED	
12		NOT USED	
13	J1	CONN., PC HEADER, 4 POS 0.100 CTR .....	17 BR 852
14	J2	CONN., PC HEADER, 5 POS 0.156 CTR .....	17 BR 903
15	J3	CONN., PC HEADER, 3 POS 0.156 CTR .....	17 BR 901
16	J4	CONN., RCPT, MALE RFI FILTER .....	17 734 30
17		NOT USED	
18		NOT USED	
19	CB1	CIRCUIT BREAKER, SP, 6.0 AMPS - 120 Vac UNITS .....	17 BH 189
	CB1,CB2	CIRCUIT BREAKER, SP, 6.0 AMPS - 100 Vac UNITS .....	17 BH 189
	CB1,CB2	CIRCUIT BREAKER, SP, 3.0 AMPS - 220/240 Vac UNITS ...	17 BH 184
20		NOT USED	
21	R1,R2,R3	RESISTOR, JUMPER .....	17 217 62
22		NOT USED	
23		GREEN/YELLOW WIRE, 18 AWG, 600 V .....	17 717 65
24		NOT USED	
25		TERMINAL RING, INS #6 22 - 16 .....	17 722 41
26		NOT USED	
27	L1,L2	LINE FILTER, 250V 4 AMPS, 29 mH .....	17 585 56
		68 365 73 ONLY	

Change 4

## C500/C550 PARTS LIST



**FIGURE 6.10 PARTS LOCATION DIAGRAM, HEATER BOARD**

### Change 6



TABLE 6.10 HEATER BOARD, PARTS LIST

(Sheet 1 of 2)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		HEATER BOARD ASSEMBLY (100V/120V) .....	68 366 70
		HEATER BOARD ASSEMBLY (220V/240V) .....	68 366 71
		HEATER BOARD ASSEMBLY (100V) .....	68 366 72 ■
1		NOT USED	
2		NOT USED	
3		NOT USED	
4		NOT USED	
5		NOT USED	
6		NOT USED	
7		NOT USED	
8		NOT USED	
9		NOT USED	
10	C1, 4, 8, 16	CAP., TANT., 10 UF, $\pm 10\%$ 25 VDC .....	17 AW 236
11	C6, C10	CAP., PAPER, 47 UF +50%, - 10% .....	17 AW 411
12	C5	CAP., 0.22 UF, $\pm 10\%$ 63 VDC .....	17 AY 138
13	C2, 3, 7, 9, 11, 15, 17	CAP., 0.1 UF, $\pm 10\%$ 50 VDC .....	17 BF 217
14	C12, 13, 14	CAP., 100 PF, $\pm 10\%$ 50 VDC .....	17 BF 365
15		NOT USED	
16		NOT USED	
17	F1	FUSE, PIGTL, 0.01A, 250V .....	17 BM 090
18		NOT USED	
19	J1	CONN, PC HDR, PLZD, 26 POSN .....	17 BP 654
20	J2	CONN, PC HDR, MALE, PLZD, 3 POSN .....	17 BR 901
21	J3	CONN, PC HDR, MALE, PLZD, LKG, 2 POSN .....	17 BS 132
22	J4	CONN, PC HDR, MALE, PLZD, LKG, 12 POSN .....	17 BS 142
23		NOT USED	
24	CR1, 2, 5, 6, 8	DIODE, 1N914A .....	17 AR 501
25	CR4, 7	DIODE, 1N4733A .....	17 502 20
26	CR3	DIODE BRIDGE, 1.5A, 100V .....	17 AS 201
27		NOT USED	
28	U3	IC, MOTOR CONTROLLER .....	17 633 62
29	U1	IC, MC14106B .....	17 633 60
30	U4	IC, DUAL OP-AMP, LM358A .....	17 631 85
31	U2	IC, QUAD COMPARATOR, 3302 .....	17 629 58
32		NOT USED	
33		NOT USED	
34	K2	RELAY, SPST-N.O. 280V, 45A (SOLID STATE RELAY) .....	17 652 99
35	K1	RELAY, DPST-N.O. 250V, 10A .....	17 652 98
36		NOT USED	
37	R5, R6	RESISTOR, 130 OHM, 1 %, 1/8W .....	17 AF 107
38	R19	RESISTOR, 432 OHM, 1 %, 1/8W .....	17 AF 157
39	R4, 7, 23	RESISTOR, 0 OHM .....	17 217 62
40	R21	RESISTOR, 255 OHM, 1 %, 1/8W .....	17 AF 135
41	R17, 18	RESISTOR, 2.49K, 1 %, 1/8W .....	17 AF 230

Change 5

TABLE 6.10 HEATER BOARD, PARTS LIST

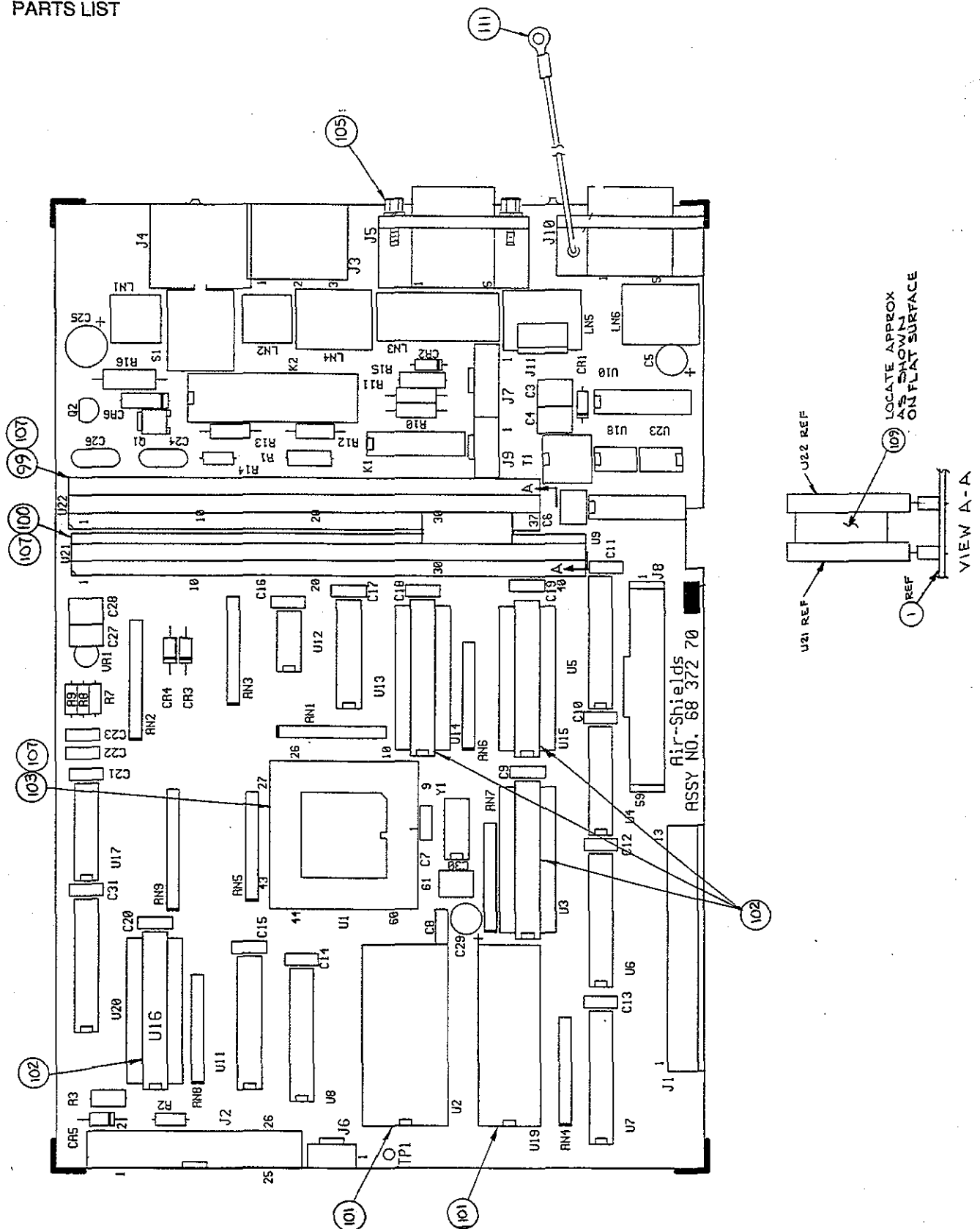
(Sheet 2 of 2)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
42	R11	RESISTOR, 2.94K, 1 %, 1/8W	17 AF 237
43		NOT USED	
44	R24	RESISTOR, 35.7K, 1 %, 1/8W	17 AF 341
45	R9	RESISTOR, 52.6K, 1 %, 1/8W	17 AF 360
46	R8	RESISTOR, 100K, 1 %, 1/8W	17 AF 384
47	R12,16	RESISTOR, 200K, 1 %, 1/8W	17 AF 413
48	R10	RESISTOR, 3.09K, 1 %, 1/8W	17 AF 239
49	R20	RESISTOR, 5.10K, 1 %, 1/8W	17 AF 779
50	R25	RESISTOR, 154K, 1 %, 1/8W	17 AF 402
51	R1,13,14,15	RESISTOR, 1.00M, 1 %, 1/8W	17 AH 889
52	R22	RESISTOR, 0.15 OHM, 5%, 2W, WW	17 AN 444
53	R2,3	RESISTOR, 6.98K, 1 %, 1/8W	17 AF 273
54	R26,27	POTENTIOMETER, 5K, 10%, 0.5W	17 AN 126
55		NOT USED	
56	RN1,2	RESISTOR, SIP, 10K	17 AU 227
57	RN3,4	RESISTOR, SIP, 4.7K	17 AU 215
58		NOT USED	
59	TP1-5	CONN, PC, HEADER, SGL ROW, 5 PINS	17 BP 375
60		NOT USED	
61	RT1	THERMISTOR, NTC, 10K, 1%	17 575 25
62	T1	POWER TRANSFORMER	17 605 48
63		NOT USED	
64	Q1	TRANSISTOR, IRFD110	17 627 97
65		NOT USED	
66		LOCTITE, SCREWLOCK222	AR
67	UX3	HEAT SINK	68 366 25
68		NUT, SELFCLINCHING, 6-32	99 105 65
69		TEFLON SLEEVING, 0.531 ID	AR
70		SCREW, 4 - 40 X 1/4" TR PH SS SEMS	99 010 65
71		SCREW, 6 - 32 X 5/16" TR PH SS SEMS	99 023 05
72		SCREW, 8 - 32 X 3/8" TR PH SS SEMS	99 031 50
73		SCREW, 6-32 X 1.25 TR PH SS	99 025 69
74		FLAT WASHER, NO. 4 SS	99 121 21
75		FLAT WASHER, NO. 6 SS	99 122 03
76		NOT USED	
77		NOT USED	
78		FLAT WASHER, NO. 8 SS	99 122 62
79		WASHER, SQ CONE #6, 0.025 THK	99 122 21
80		STANDOFF, THREADED, 4 - 40 C 0.625 LG, SS	99 116 45

Change 6

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## C500/C550 PARTS LIST



**FIGURE 6.11 PARTS LOCATION DIAGRAM, MAIN BOARD**

### Change 1

TABLE 6.11 MAIN BOARD, PARTS LIST

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
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THE MAIN BOARD IS A MULTI-LAYER BOARD. THE ITEMS LISTED BELOW ARE THE ONLY COMPONENTS THAT CAN BE REPLACED IN THE FIELD. ATTEMPTING TO REPLACE ANY OTHER COMPONENT MAY RESULT IN DAMAGE TO THE BOARD.

		MAIN BOARD ASSEMBLY 120V ENG .....	68 908 40
		MAIN BOARD ASSEMBLY US AND CANADA .....	68 908 41
		MAIN BOARD ASSEMBLY INTERNATIONAL .....	68 908 42
		MAIN BOARD ASSEMBLY GERMAN .....	68 908 43
		MAIN BOARD ASSEMBLY RUSSIAN .....	68 908 44
1	U1	PROCESSOR, 68HC11F1 .....	17 633 59
2	U2	FIRMWARE, C500/C550 CONTROLLER ENG & INT .....	68 372 50
		FIRMWARE, C500/C550 CONTROLLER US & CAN .....	68 372 51
		FIRMWARE, C500/C550 CONTROLLER GER .....	68 372 52
		FIRMWARE, C500/C550 CONTROLLER RUS .....	68 372 53
3	U3	FIRMWARE, MAIN BOARD DECODER .....	68 372 45
4	U14	FIRMWARE, ALARM LOGIC 1 .....	68 372 30
5	U15	FIRMWARE, ALARM LOGIC 2 .....	68 372 35
6	U16	FIRMWARE, ALARM LOGIC 3 .....	68 372 40
7	U21	MONITOR HYBRID .....	68 367 70
8	U22	CONTROL HYBRID .....	68 368 70
105		SCREW LOCK, 4 - 40 .....	505C00022-02
111		JUMPER WIRE, GND CONN .....	68 372 64

Change 6

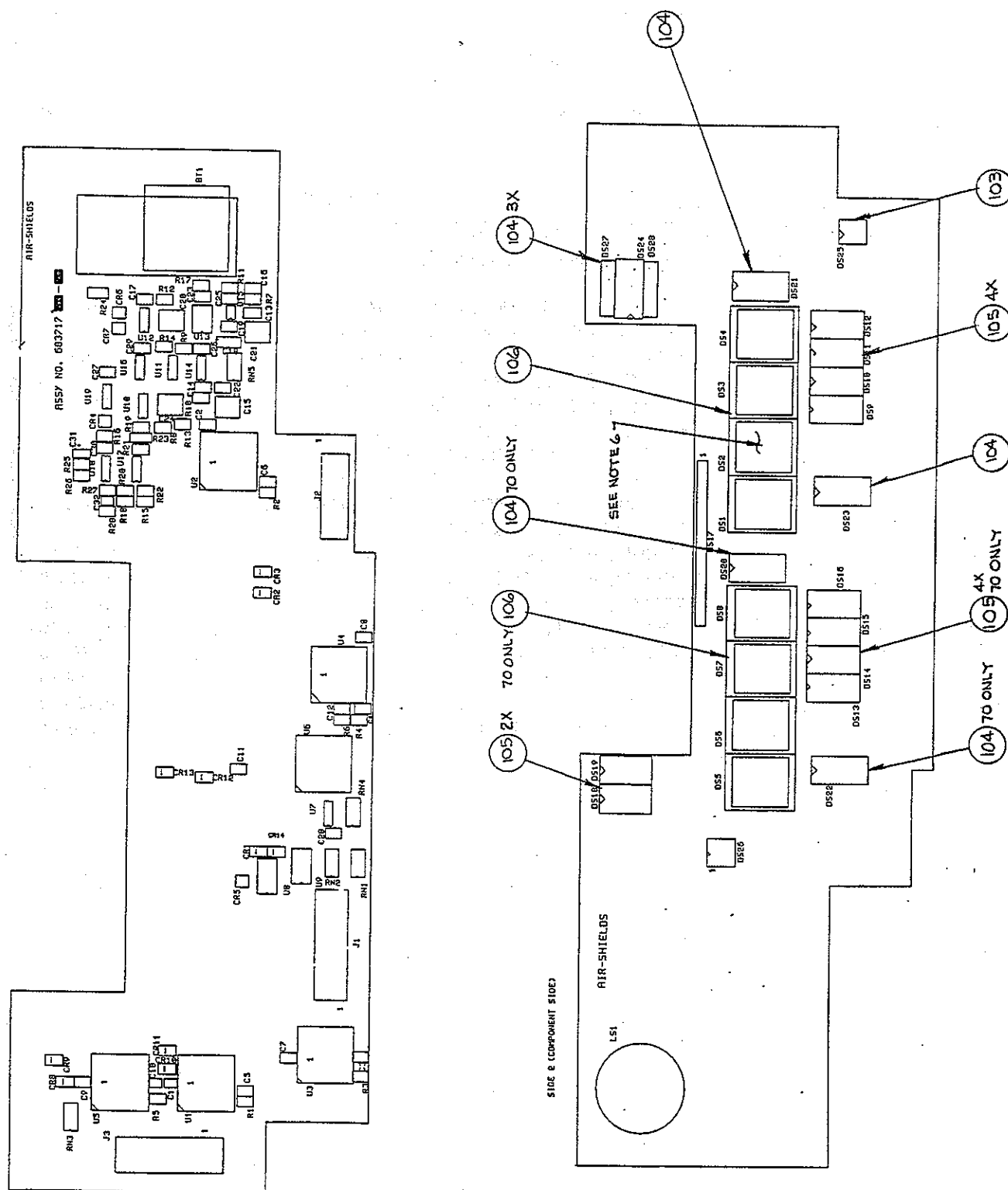


FIGURE 6.12 PARTS LOCATION DIAGRAM, DISPLAY BOARD

TABLE 6.12 DISPLAY BOARD, PARTS LIST

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
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THE DISPLAY BOARD IS A MULTI-LAYER BOARD. THE ITEMS LISTED BELOW ARE THE ONLY COMPONENTS THAT CAN BE REPLACED IN THE FIELD. ATTEMPTING TO REPLACE ANY OTHER COMPONENT MAY RESULT IN DAMAGE TO THE BOARD.

		DISPLAY BOARD ASSEMBLY C500 .....	68 371 71
		DISPLAY BOARD ASSEMBLY C550 .....	68 371 70
		DISPLAY BOARD ASSEMBLY C550 JAP .....	68 371 72
1	DS9-16,18,19	DISPLAY, HP HDSP 3601	
2	DS29,21	DISPLAY, HP HLMP 2770	
3	DS22,23	DISPLAY, HP HLMP 2885	
4	DS24	DISPLAY, HP HLMP 2685	
5	DS25	DISPLAY, HP HLMP 2855	
6	DS26	DISPLAY, HP HLMP 2755	
7	DS27,28	DISPLAY, HP HLMP 2350	
8	BT1*	BATTERY, 4.8 VOLT, 0.1AH NI CAD .....	17 807 79

\*CAUTION: The display printed circuit board is a 6 layer PCB. Extreme caution should be used when handling and performing this procedure.

Change 5

C500/C550  
PARTS LIST

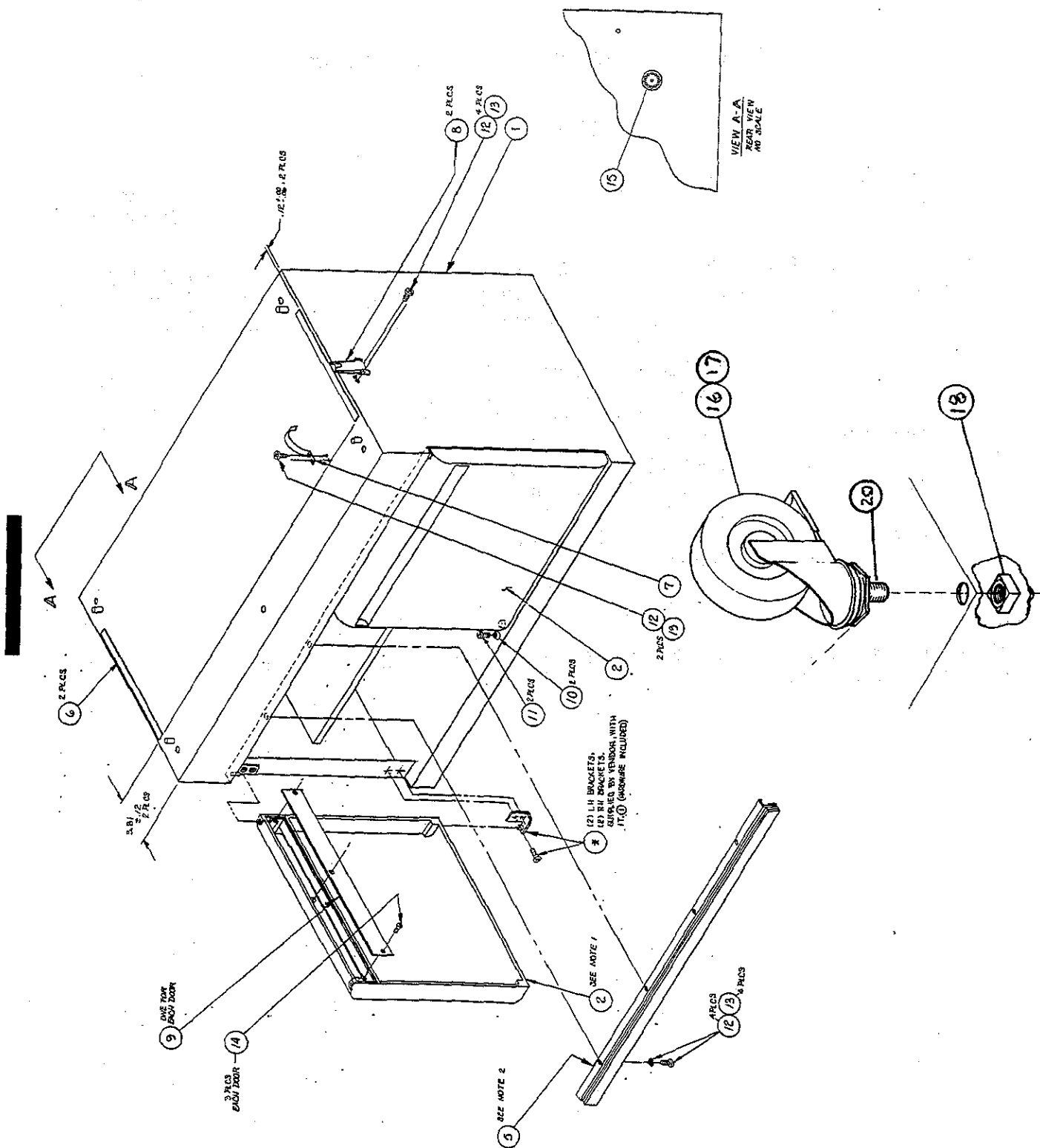


FIGURE 6.13 PARTS LOCATION DIAGRAM, CABINET STAND ASSEMBLY

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TABLE 6.13 CABINET STAND ASSEMBLY, PARTS LIST

(Sheet 1 of 1)

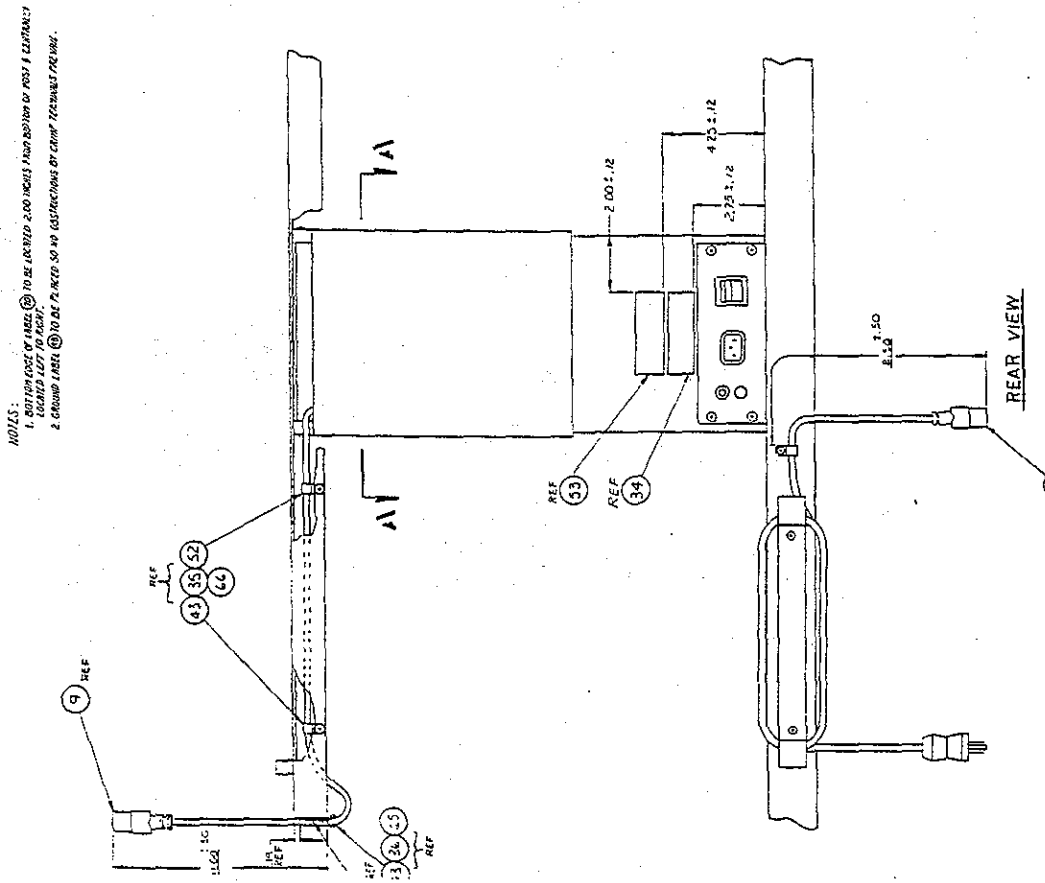
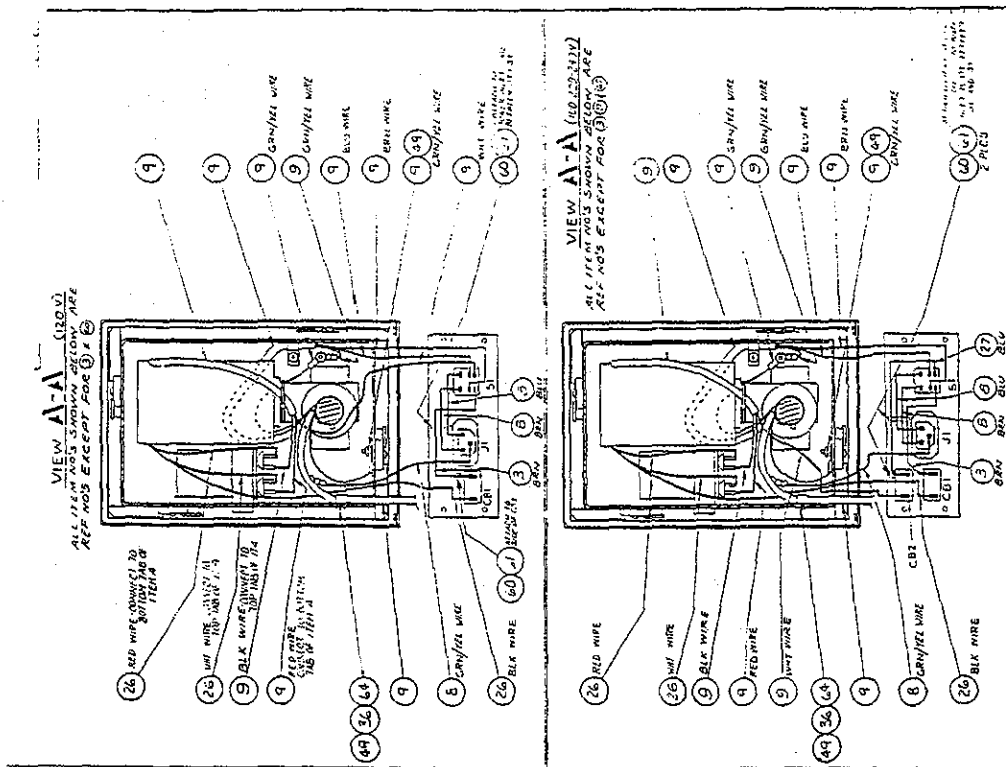
ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		C500/C550 CABINET STAND ASSEMBLY .....	68 416 30
1		CABINET STAND WELDMENT .....	68 416 00
2		CABINET STAND DOOR .....	68 416 05
3		NOT USED	
4		NOT USED	
5		MAGNETIC CATCH ASSEMBLY .....	68 416 20
6		NEOPRENE SPONGE STRIP, 11" LONG .....	26 800 33
7		GROUNDING SPRING .....	68 400 27
8		CABINET LATCH .....	24 717 00
9		DOOR STRIKER PLATE .....	68 416 28
10		RECESSED RUBBER BUMPER .....	26 605 00
11		SCREW, 6 - 32 X 0.38 FI SL SS .....	99 023 25
12		SCREW, 6 - 32 X 1/4 TR PH SS .....	99 022 72
13		LOCK WASHER, EXT #6 SS .....	99 122 20
14		SCREW, SLFPG, 4 - 40 X 3/8 BT FL S NI .....	99 083 02
15		VENTED HOLE PLUG .....	68 416 29
16		CASTER, 5.00" DIAMETER WITH BRAKE .....	68 416 16
17		CASTER, 5.00" DIAMETER WITHOUT BRAKE .....	68 416 18
18		SQUARE NUT, 1/2 X 13, 13/16 ACROSS FLATS .....	99 113 03
19		NOT USED	
20		LOCTITE 242 .....	AR ■

Change 6

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### Change 1

## C500/C550 PARTS LIST



**FIGURE 6.14 PARTS LOCATION DIAGRAM, VHA STAND ASSEMBLY (SHEET 2 OF 2)**

TABLE 6.14 VHA STAND ASSEMBLY, PARTS LIST

(Sheet 1 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		VHA STAND ASSEMBLY, 120V, ENG .....	68 415 70
		VHA STAND ASSEMBLY, 120V, SPN .....	68 415 71
		VHA STAND ASSEMBLY, 120V, FRN .....	68 415 72
		VHA STAND ASSEMBLY, 220/240V, ENG .....	68 415 80
		VHA STAND ASSEMBLY, 220/240V, SPN .....	68 415 81
		VHA STAND ASSEMBLY, 220/240V, FRN .....	68 415 82
		VHA STAND ASSEMBLY, 220V, GER .....	68 415 83
		VHA STAND ASSEMBLY, 220/240V, ITL .....	68 415 84
1		NOT USED	
2		DRAW LATCH, MODIFIED .....	68 404 20
3		JUMPER BRKR SW .....	68 405 39
4		CAP, 30 MFD, 240V 60HZ, MET PLYPR .....	17 405 81
		CAP, 10 MFD, 370V 60HZ, MET PLYPR .....	17 405 82
		CAP, 50 MFD, 240V 60HZ, MET PLYPR .....	17 405 83
5		NOT USED	
6		NOT USED	
7		CAPACITOR CLAMP 100V/120V UNITS .....	68 404 24
		CAPACITOR CLAMP, 220/240V UNITS .....	68 404 25
8		POWER INLET PLATE ASSY, 120V ENG .....	68 415 50
		POWER INLET PLATE ASSY, 120V SPN .....	68 415 51
		POWER INLET PLATE ASSY, 120V FRN .....	68 415 52
		POWER INLET PLATE ASSY, 220/240V ENG .....	68 415 53
		POWER INLET PLATE ASSY, 220/240V SPN .....	68 415 54
		POWER INLET PLATE ASSY, 220/240V FRN .....	68 415 55
		POWER INLET PLATE ASSY, 220V GER .....	68 414 56
		POWER INLET PLATE ASSY, 220/240V ITL .....	68 414 58
9		ACTUATOR ASSY 120V 50/60HZ .....	68 405 32
		ACTUATOR ASSY 220/240V 50/60HZ .....	68 405 33
		ACTUATOR ASSY 100V 50/60HZ .....	68 405 32
10		BASE COVER .....	68 415 01
11		FOAM TAPE, DBL SIDED, 3MY-4952 .....	AR
12		BASE WELDMENT .....	68 415 00
13		PLATFORM .....	68 415 05
14		COLUMN, INNER ASSY (REFER TO TABLE 6.12) .....	68 404 40
15		PLATE, TOP .....	68 405 13
16		ESCUTCHEON .....	68 415 20
17		NOT USED	
18		CASTER, 5.00 FULL LOCK .....	68 416 16
19		COVER PLATE, FOOT SWITCH .....	68 415 07
20		NOT USED	
21		NOT USED	
22		CLEAT, POWER CORD .....	68 415 22
23		NOT USED	
24		NOT USED	

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TABLE 6.14 VHA STAND ASSEMBLY, PARTS LIST

(Sheet 2 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
25		FOOT SWITCH ASSEMBLY	68 415 46
26		FOOT SWITCH ASSEMBLY INTL	68 405 47
27		JUMPER, BRKR-SW	68 405 30
28		CABLE ASSY, AC POWER 120V	17 AZ 100
		CABLE ASSY, AC POWER 220/240V	17 AZ 200
29		NOT USED	
30		NOT USED	
31		NOT USED	
32		NOT USED	
33		NOT USED	
34		NOT USED	
35		CLAMP, CORD	17 061 25
36		CLAMP, CORD	17 732 42
37		SPONGE STRIP, NEO	26 800 33
38		LABEL, POWER CORD ENG	68 415 30
		LABEL, POWER CORD SPN	68 415 31
		LABEL, POWER CORD FRN	68 415 32
		LABEL, POWER CORD GER	68 415 33
		LABEL, POWER CORD ITL	68 415 34
39		NOT USED	
40		SCREW, 4-40 x 1/4 TR PH SS	99 010 56
41		SCREW, 6-32 x 3/8 TR PH SS	99 023 31
42		NOT USED	
43		SCREW, 8-32 x 3/8 TR PH SS	99 031 38
44		SCREW, 10-32 x 3/8 TR PH SS	99 041 27
45		NOT USED	
46		NOT USED	
47		NOT USED	
48		GROUND LABEL	68 212 00
49		NUT, 6-32 HX "KEPS" S CA	99 105 34
50		NUT, 1/4-20 HX "KEPS" S CA	99 109 41
51		NOT USED	
52		NUT, 8-32 HX "KEP" S CA	99 106 32
53		CAUTION LABEL, ELECTRIC SHOCK, ENG	68 422 90
		CAUTION LABEL, ELECTRIC SHOCK, SPN	68 422 91
		CAUTION LABEL, ELECTRIC SHOCK, FRN	68 422 92
		CAUTION LABEL, ELECTRIC SHOCK, GER	68 422 93
		CAUTION LABEL, ELECTRIC SHOCK, ITL	68 422 94
54		WASHER, #4 LK SP SS	99 121 36
55		WASHER, #6 LK SP SS	99 122 16
56		NOT USED	
57		WASHER, #10 LK SP S CA	99 124 16
58		NOT USED	
59		NOT USED	

Change 1

TABLE 6.14 VHA STAND ASSEMBLY, PARTS LIST

(Sheet 3 of 3)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
60		CABLE TIE MOUNT	17 061 87
61		CATCH, SECONDARY	68 404 21
62		NOT USED	
63		NOT USED	
64		SCREW, 6-32 x 1/2 TR PH SS	99 023 92
65		WASHER, LK EXT #8 SS	99 122 93
66		WASHER, FL #8 SS	99 122 62
67		LOCTITE 222	AR
68		HEAVY EQUIPMENT LABEL, ENG	68 415 40
		HEAVY EQUIPMENT LABEL, SPN	68 415 41
		HEAVY EQUIPMENT LABEL, FRN	68 415 42
		HEAVY EQUIPMENT LABEL, GER	68 415 43
		HEAVY EQUIPMENT LABEL, ITL	68 415 44
69		SCREW, 10 - 32 X 1/2" FL PH SS	99 042 06
70		INTERMITTENT OPERATION LABEL, ENG	68 415 60
		INTERMITTENT OPERATION LABEL, SPN	68 415 61
		INTERMITTENT OPERATION LABEL, FRN	68 415 62
		INTERMITTENT OPERATION LABEL, GER	68 415 63
		INTERMITTENT OPERATION LABEL, ITL	68 415 64

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C500/C550  
PARTS LIST

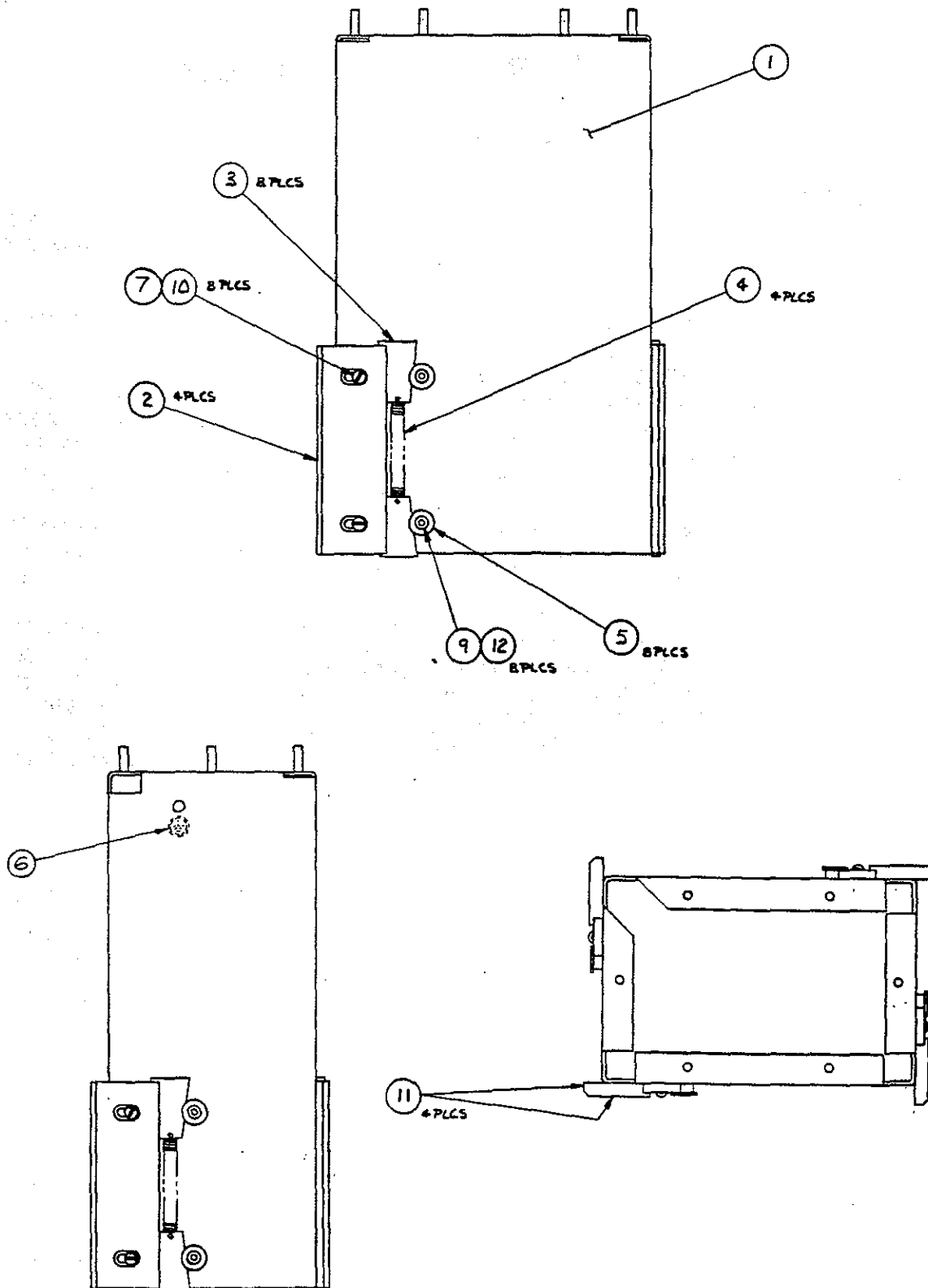


FIGURE 6.15 PARTS LOCATION DIAGRAM, INNER COLUMN ASSEMBLY



TABLE 6.15 INNER COLUMN ASSEMBLY, PARTS LIST

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
-		INNER COLUMN ASSEMBLY	68 404 40
1		COLUMN, INNER	68 405 11
2		GIB, SELF-ADJUSTING	68 405 25
3		WEDGE, GIB	68 405 27
4		SPRING, EXTENSION	68 405 29
5		BUSHING, RETAINER	68 405 31
6		LABEL, GROUND	68 212 00
7		NUT, 10-32 HX SS	99 107 00
8		NOT USED	
9		SCREW, 10-32 x 5/8 FL SK S BO	99 042 63
10		SCREW, 10-32 x 3/16 SH SL SS	99 195 02
11		LUBRICANT, DOW CORNING #111	AR
12		LOCTITE, 271	AR

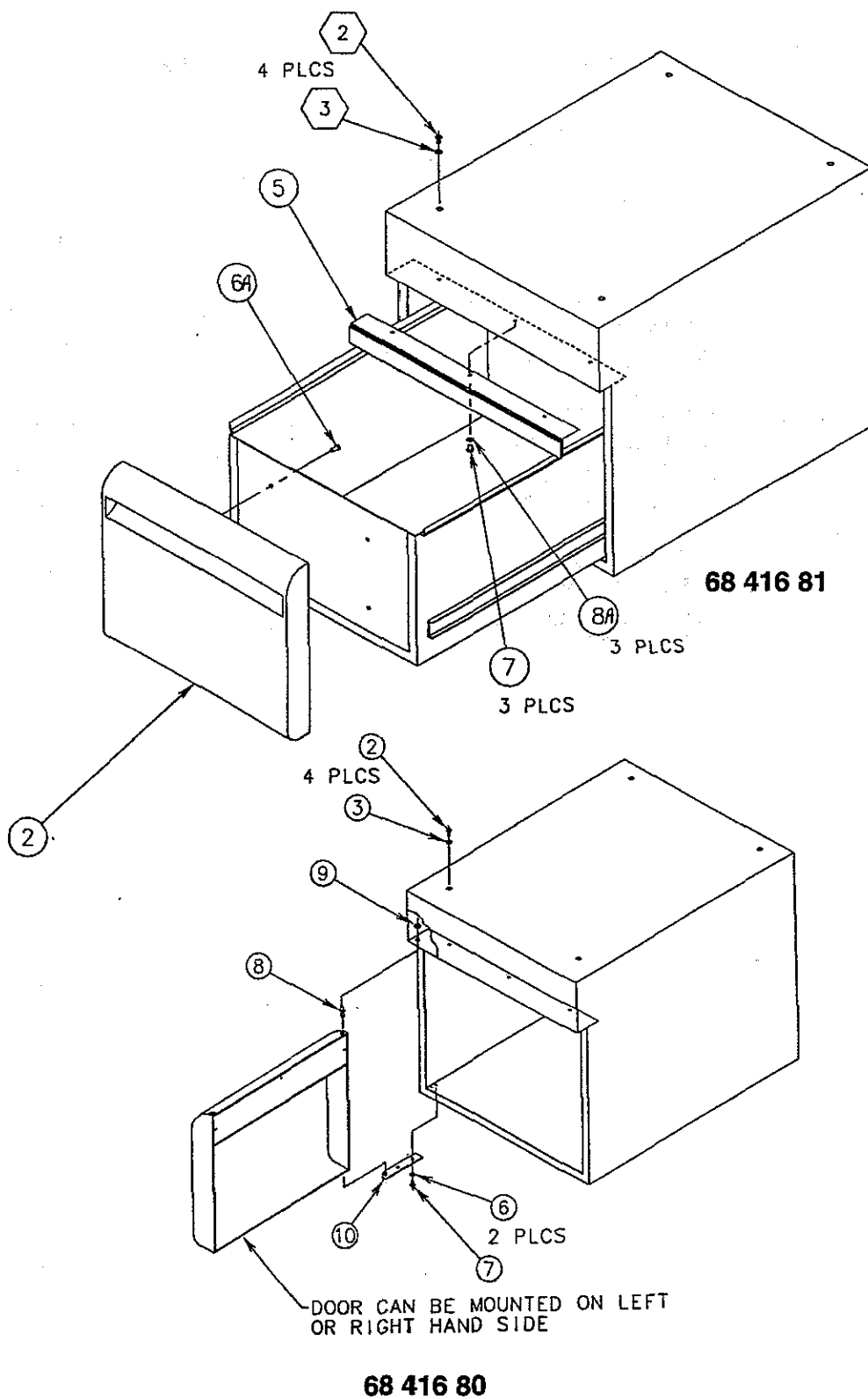


FIGURE 6.16 PARTS LOCATION DIAGRAM, CABINET, VHA STAND

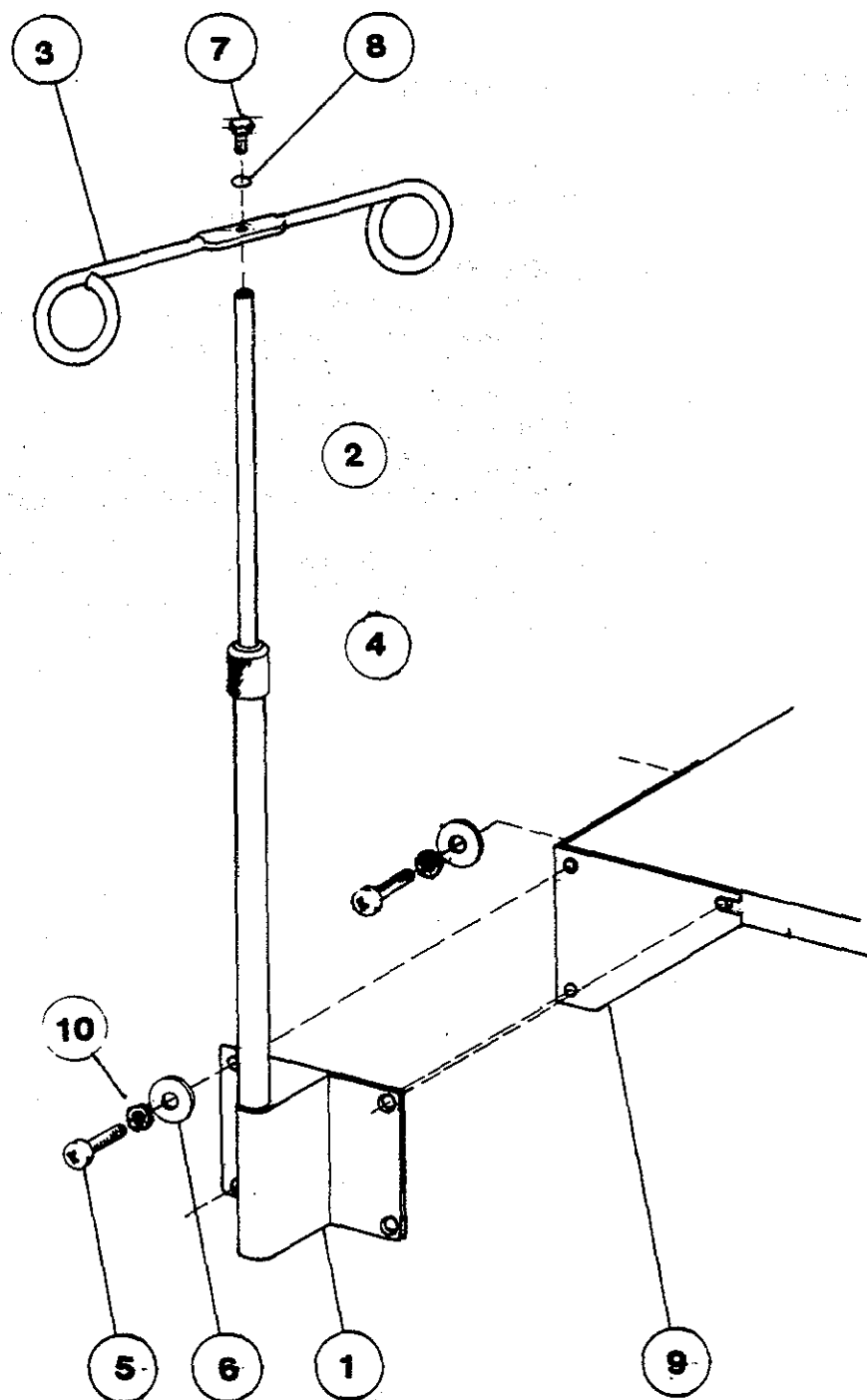
Change 5

TABLE 6.16 CABINET, VHA STAND, PARTS LIST

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		VHA STAND CABINET .....	68 416 80
		VHA STAND CABINET WITH DRAWER .....	68 416 81
1		DOOR ASSEMBLY .....	68 416 87
2		SCREW, 10 - 32 X 5/8-INCH, PHILLIPS HEAD (QTY 4) .....	99 042 58
3		LOCK WASHER, NO. 10 (QTY 4) .....	99 123 94
4			
5		MAGNETIC CATCH ASSY .....	68 416 55
6		LOCK WASHER, NO. 6 .....	99 122 20
6A		SCREW, 8 - 32 X 0.38 TR PH SS NYLOK .....	99 031 52
7		SCREW, 6 - 32 X 3/8-INCH, PHILLIPS HEAD (QTY 5) .....	99 023 31
8		PIVOT PIN .....	68 416 67
8A		LOCK WASHER, EXT #6 .....	99 122 20
9		HEX NUT, 8 - 32, KEPS .....	99 106 32
10		HINGE PLATE .....	68 416 66

Change 5

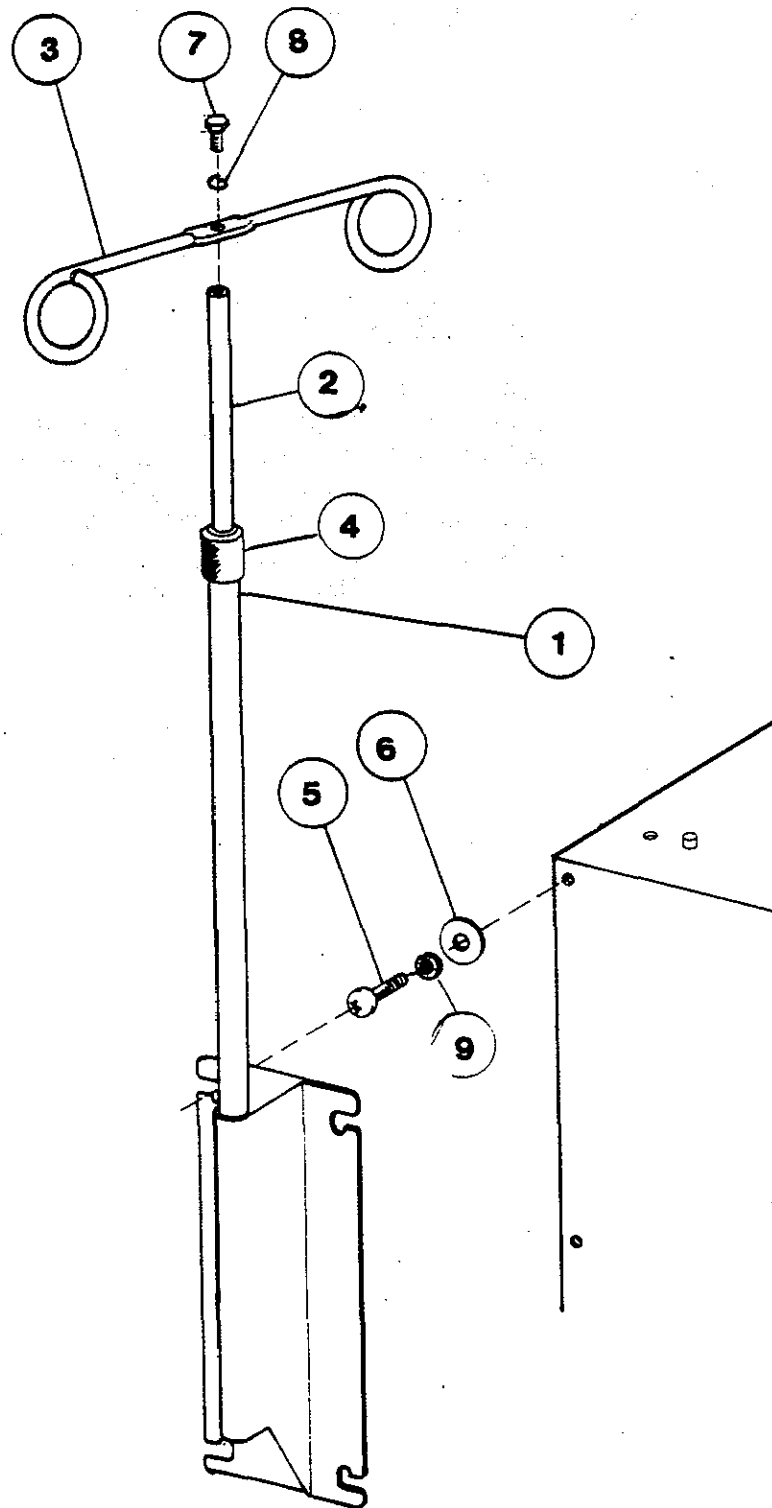


**FIGURE 6.17 PARTS LOCATION DIAGRAM, I.V. POLE ASSEMBLY, VHA STAND**

TABLE 6.17 I.V. POLE ASSEMBLY, VHA STAND ASSEMBLY, PARTS LISTS

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		I.V. POLE ASSEMBLY VHA STAND .....	68 415 25
1		I.V. POLE BASE .....	68 415 26
2		UPPER EXTENSION ASSEMBLY .....	26 825 71
3		CROSS ARM .....	26 822 00
4		LOCKING NUT .....	26 821 00
5		SCREW, 1/4 - 20 X 3/4", PHILLIPS HEAD (QTY 5) .....	99 057 01
6		FLAT WASHER, 3/8" X 3/4" X 5/32" (QTY 5) .....	68 405 55
7		SCREW, 5/16" - 18 X 1/2", HEX HEAD .....	99 064 21
8		LOCK WASHER, 5/16", SMALL PATTERN .....	99 126 32
9		CORNER BRACKET .....	68 407 81
10		SPLIT LOCK WASHER, 1/4" (QTY 5) .....	99 125 53



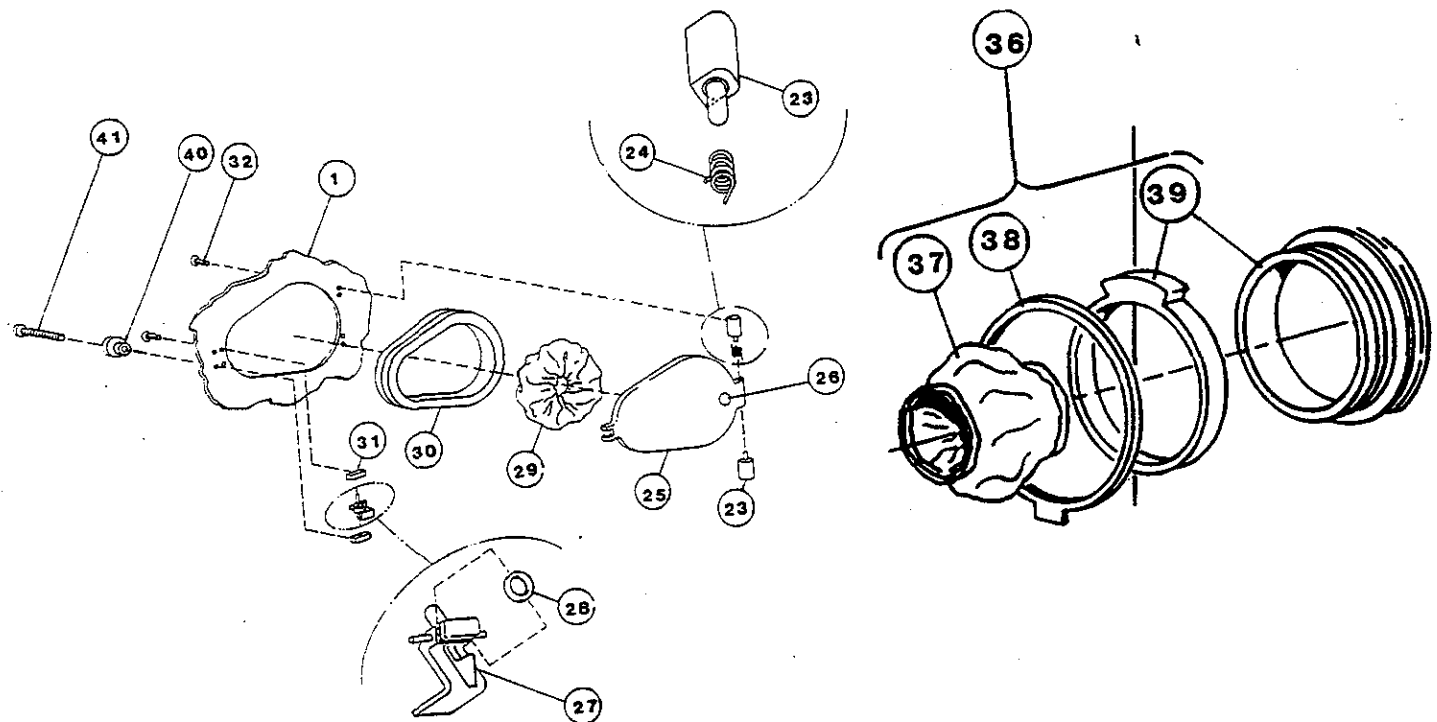
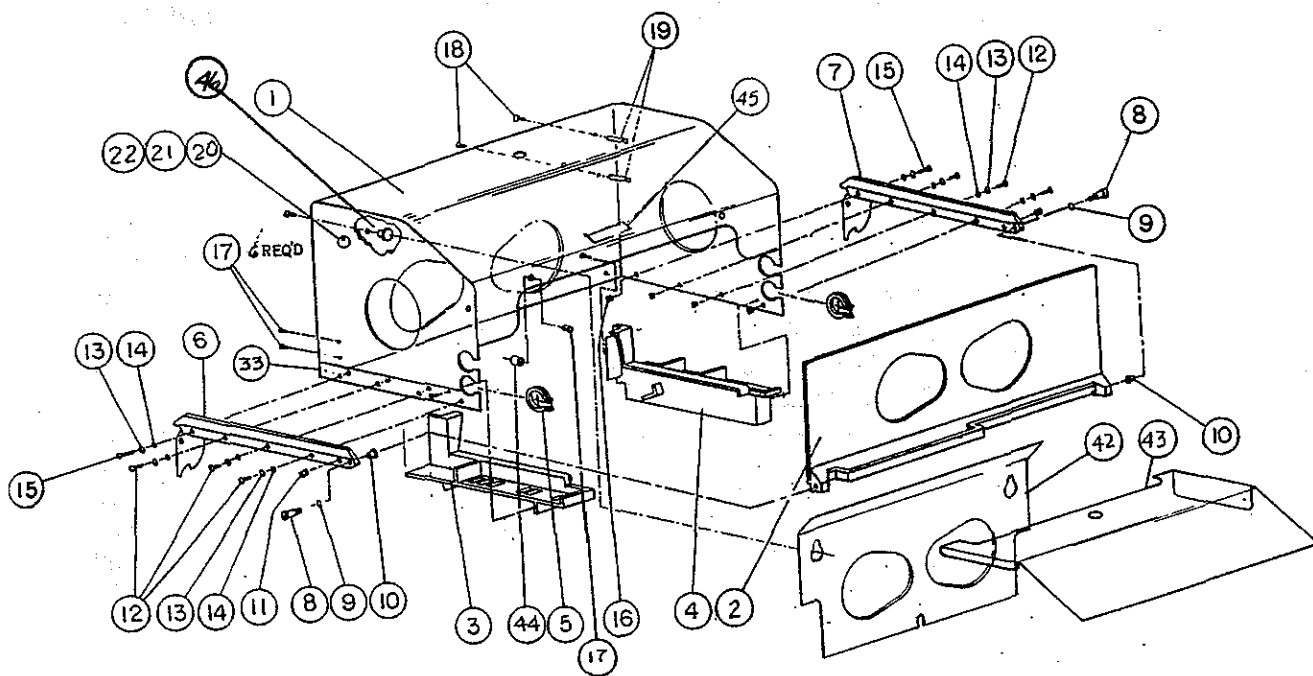
**FIGURE 6.18 PARTS LOCATION DIAGRAM, I.V. POLE ASSEMBLY, STANDARD  
CABINET STAND**

**TABLE 6.18 I.V. POLE ASSEMBLY, STANDARD CABINET STAND ASSEMBLY,  
PARTS LIST**

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		I.V. POLE ASSEMBLY, STANDARD CABINET STAND .....	68 416 35
1	.....	I.V. POLE BASE .....	68 416 36
2	.....	UPPER EXTENSION ASSEMBLY .....	26 825 71
3	.....	CROSS ARM .....	26 822 00
4	.....	LOCKING NUT .....	26 821 00
5	.....	SCREW, 1/4 - 20 X 5/8", PHILLIPS HEAD (QTY2) .....	99 056 59
6	.....	FLAT WASHER, 1/4" X 3/4 (QTY2) .....	99 125 22
7	.....	SCREW, 5/16" - 18 X 1/2", HEX HEAD .....	99 064 21
8	.....	LOCK WASHER, 5/16", SMALL PATTERN .....	99 126 32
9	.....	SPLIT LOCK WASHER, 1/4" (QTY 2) .....	99 125 53

C500/C550  
PARTS LIST



**FIGURE 6.19 PARTS LOCATION DIAGRAM, HOOD ASSEMBLY, C500/C550 QT®  
MODEL XL**

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**TABLE 6.19 HOOD ASSEMBLY, C500/C550 QT® MODEL XL,  
PARTS LIST**  
(Sheet 1 of 2)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		HOOD ASSEMBLY, 3 ACCESS DOORS, 1 IRIS PORT .....	68 232 46
		HOOD ASSEMBLY, 2 ACCESS DOORS, 2 IRIS PORT .....	68 232 45
1**		HOOD, INCUBATOR (ACRYLIC ONLY)	
		3 ACCESS DOORS, 1 IRIS PORT REPL KIT ENG .....	68 904 30
		3 ACCESS DOORS, 1 IRIS PORT REPL KIT SPN .....	68 904 31
		3 ACCESS DOORS, 1 IRIS PORT REPL KIT FRN .....	68 904 32
		3 ACCESS DOORS, 1 IRIS PORT REPL KIT GER .....	68 904 33
		3 ACCESS DOORS, 1 IRIS PORT REPL KIT GER .....	68 904 34
		2 ACCESS DOORS, 2 IRIS PORT REPL KIT ENG .....	68 904 20
		2 ACCESS DOORS, 2 IRIS PORT REPL KIT SPN .....	68 904 21
		2 ACCESS DOORS, 2 IRIS PORT REPL KIT FRN .....	68 904 22
		2 ACCESS DOORS, 2 IRIS PORT REPL KIT GER .....	68 904 23
		2 ACCESS DOORS, 2 IRIS PORT REPL KIT GER .....	68 904 24
2		ACCESS PANEL ASSY (REFER TO TABLE 6.20)	
3		BAFFLE LEFT .....	68 156 34
4		BAFFLE RIGHT .....	68 156 14
5		ACCESS GROMMET .....	68 120 45
6		HOOD MOUNT, LEFT SIDE .....	68 121 15
7		HOOD MOUNT, RIGHT SIDE .....	68 121 05
8*		SCREW, SHOULDER SLOTTED HEAD .....	68 121 30
9*		WASHER, NON-METALLIC, 3/8 ID .....	68 121 40
10*		BEARING FLANGE, 3/8 ID .....	68 121 35
11*		PLUNGER SPRING .....	68 121 45
12		SCREW, 10 - 32 X 5/8, LG, TR, PH SS .....	99 042 58
13		WASHER, NO. 10, LOCK INTER, SS .....	99 123 92
14		WASHER, NO. 10, FLAT SS 0.062 THK .....	99 123 62
15		SCREW, 10 - 32, 7/8 LG, TR, PH, SS .....	99 043 18
16		STUD, THREADED, 10 - 32 .....	26 301 14
17		SCREW, 6 - 32 X 7/16, TR, PH, SS .....	99 023 63
18		SCREW, 6 - 32 X 3/4, TR, PH, SS .....	99 024 69
19		HUMIDITY CARD MOUNTING STUD .....	68 120 41
20		THREADED STUD, 10 - 32 .....	26 301 14
21		COVER PLATE .....	26 651 22
22		SCREW, 10 - 32 X 1/4 .....	99 040 51
23		HINGE PIVOT .....	68 510 05
24		TORSION SPRING .....	68 510 10
25		DOOR ASSEMBLY .....	68 902 85
26		BUMPER CLR POLYURETH, SELF ADHES .....	78 293 10
27		ACCESS DOOR LATCH ASSEMBLY, INCLUDES ITEM 28 ...	68 902 97
28		O-RING, 3/8 DIA X 1/2 OD X 1/16 NPRN .....	99 160 54
29		ACCESS DOOR CUFF, REUSABLE .....	68 120 56
		ACCESS DOOR CUFF, DISPOSABLE .....	68 120 70
30		ACCESS DOOR GASKET .....	68 120 01
31		LATCH PIVOT .....	68 510 40

\*Not supplied with Hood Assembly - Must be ordered separately.

\*\*Also order Quantity 2 of Item 35 - Trim Strip

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**TABLE 6.19 HOOD ASSEMBLY, C500/C550 QT® MODEL XL,  
PARTS LIST**

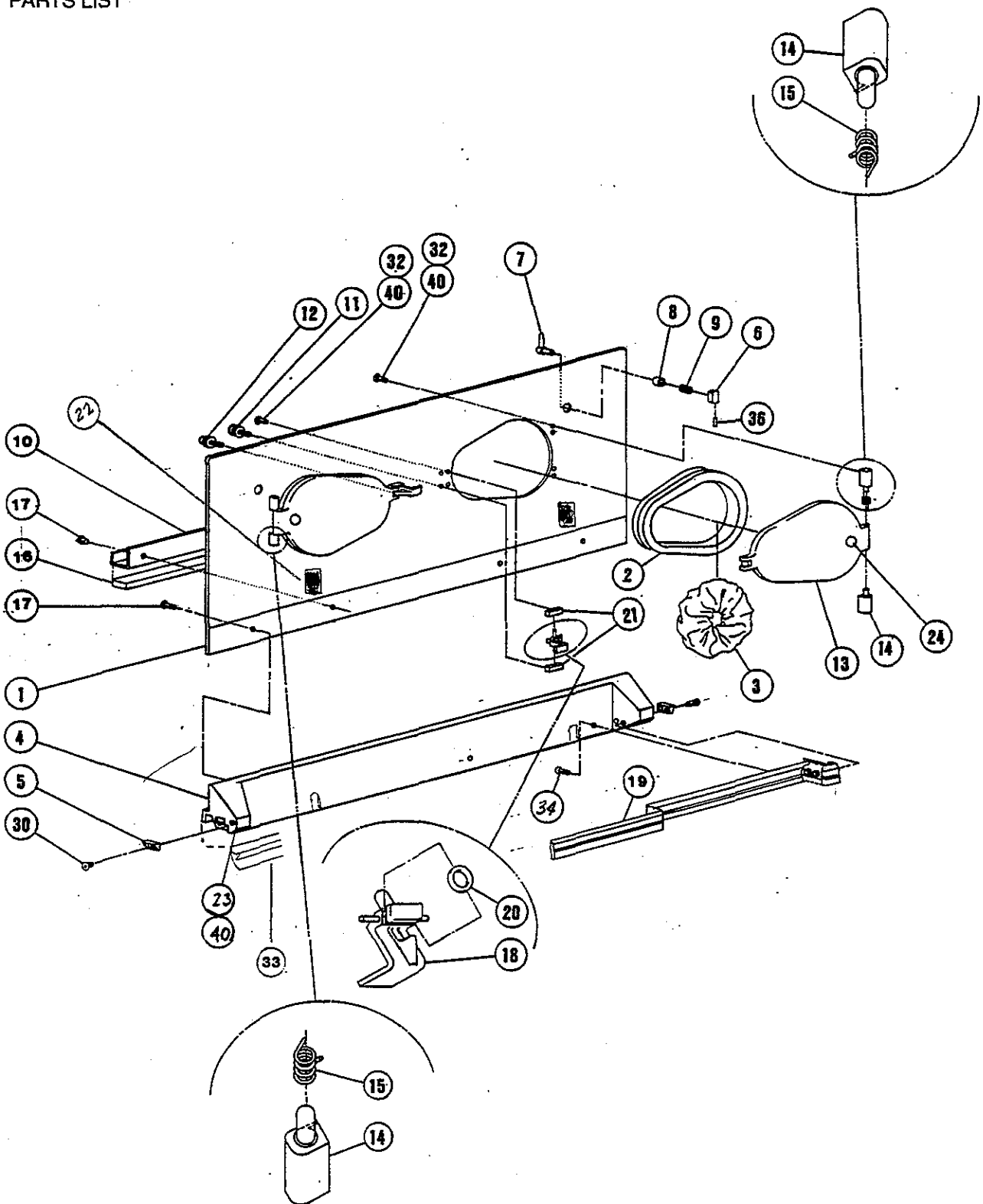
(Sheet 2 of 2)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
32		SCREW, 6 - 32 X 3/8 FL PH SS	99 023 39
33		WHITE PLASTIC TRIM STRIP	68 147 00
34		REINFORCING DISK	68 156 03
35		TRIM STRIP, WHITE	
		(NOT SHOWN) COVERS SCREWS OF ITEM 6	68 121 25
36		IRIS PORT ASSEMBLY	68 120 74
37		IRIS PORT SLEEVE, REUSABLE	12 615 01
		IRIS PORT SLEEVE, DISPOSABLE	26 920 70
38		RETAINING RING	68 120 32
39		RING ASSEMBLY	68 120 76
40		SMALL RETAINER KNOB	68 156 62
41		SCREW, 6 - 32 X 1.12 TR PH SS NYLOCK	99 025 44
42		HEAT SHIELD ASSY (REAR) REPL KIT	68 904 08
43		HEAT SHIELD ASSY (TOP) REPL KIT	68 904 14
44		SPACER, 6 - 32, 0.38 OD X 0.44 LG	68 232 24
45		NO FILTER COVER WARNING LABEL	68 115 40
46		RETAINER KNOB, 0.75 OD X 0.66 LG	68 232 25

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**FIGURE 6.20 PARTS LOCATION DIAGRAM, ACCESS PANEL ASSEMBLY,  
C500/C550 QT® MODEL XL**

Change 6

**TABLE 6.20 ACCESS PANEL ASSEMBLY, C500/C550 QT® MODEL XL, PARTS LIST**

(Sheet 1 of 1)

ITEM NO.	REFERENCE DESIG.	DESCRIPTION	PART NUMBER
		ACCESS PANEL ASSY WITH CUFFS PNEUMATIC, PINK HANDLE .....	68 232 40
		ACCESS PANEL ASSY WITHOUT CUFFS PNEUMATIC, PINK HANDLE .....	68 232 41
		ACCESS PANEL ASSY WITH CUFFS PNEUMATIC, BLUE HANDLE .....	68 232 42
		ACCESS PANEL ASSY WITH CUFFS MANUAL .....	68 232 43
1		PANEL, ACCESS, REPLACEMENT KIT, (INCLUDES ITEMS 6,7,8,9,36,38, 39 AND 41) ENG .....	68 904 90
		SPANISH .....	68 904 91
		FRENCH .....	68 904 92
		GERMAN .....	68 904 93
		ITALIAN .....	68 904 94
2		ACCESS DOOR GASKET .....	68 120 01
3		CUFF, ACCESS DOOR .....	68 120 56
4		BEZEL, ACCESS PANEL PNEUMATIC TILT .....	68 232 23
		BEZEL, ACCESS PANEL MANUAL TILT .....	68 232 28
5		PLATE, STRIKER .....	68 121 55
6		REFER TO ITEM 37	
7		REFER TO ITEM 37	
8		REFER TO ITEM 37	
9		REFER TO ITEM 37	
10		DECK CLOSE OFF BRACKET .....	68 232 19
11		KNOB, RETAINER, LARGE .....	68 156 61
12		KNOB, RETAINER, SMALL .....	68 156 60
13		DOOR, ASSEMBLY .....	68 902 85
14		PIVOT, HINGE .....	68 510 05
15		SPRING, TORSION .....	68 510 10
16		DECK CLOSE OFF BRACKET GASKET .....	68 232 15
17		SCREW, 8 - 32 X 7/16 TR PH SS .....	68 121 31
18		LATCH ASSY, ACCESS DOOR	
		INCLUDES ITEM 20 .....	68 510 26
19		HANDLE ASSY, PINK .....	68 506 42
20		O RING, 3/8 ID x 1/2 OD x 1/16, NPRN .....	99 160 54
21		PIVOT, LATCH .....	68 510 40
22		MATTRESS TRAY STOP .....	68 157 30
23		WHITE VINYL GASKET, PNEUMATIC TILT ONLY .....	68 232 16
24		BUMPER, CLR POLYURETH, SELF ADH .....	78 293 10
25		SPACER, 1/2 OD X 0.166 ID X 3/8 LG .....	68 156 66
27		NOT USED	
28		ADHESIVE, CYACRLT, LOC 404/EAST 910 .....	AR
29		ADHESIVE, CLEAR 3M4693 .....	AR
30		SCREW, 6-32 x 1/2 FL PH SS .....	99 023 94
32		SCREW, 6-32 x 7/8 NYLOK .....	99 023 64
33		WHITE VINYL GASKET 0.25 W X 17 LG, MANUAL TILT .....	68 234 02
		WHITE VINYL GASKET 0.25 W X 7 LG (QTY 2), MANUAL TILT .....	68 234 03
34		SCREW, 6- 32 X 3/8 .....	99 023 39
35		NOT USED	
36		REFER TO ITEM 37	
37		PAWL LATCH REPLACEMENT KIT .....	68 902 96
38		PINK QT/ ANIMALS LABEL .....	68 512 36
39		WARNING; INFANT SAFETY LABEL .....	68 501 20
40		COMPOUND, RTV SILICONE RUBBER, CLR .....	AR
41		PATENT PENDING LABEL .....	68 512 13

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